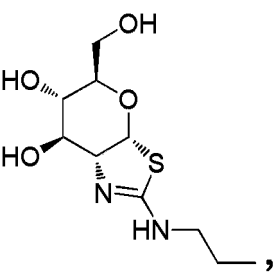
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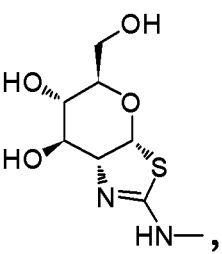
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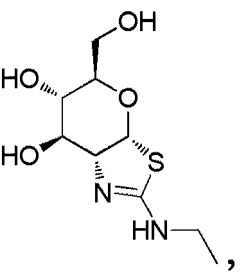
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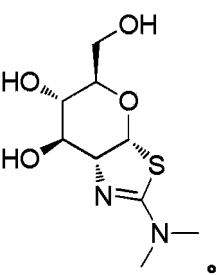
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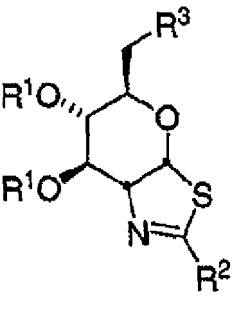

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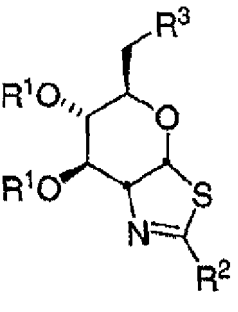

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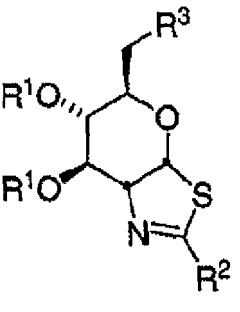

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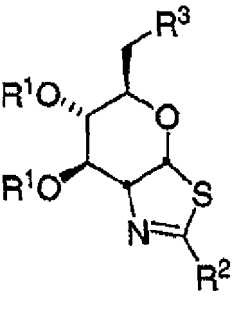

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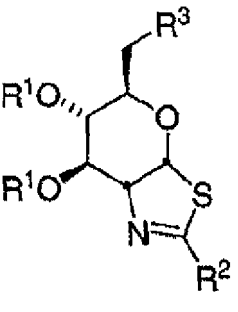

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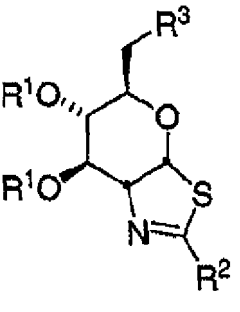

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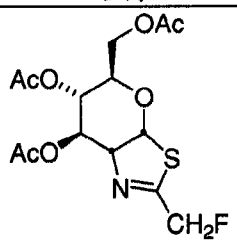
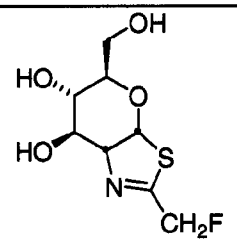
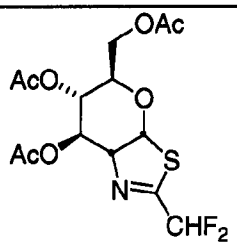
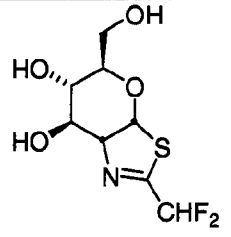
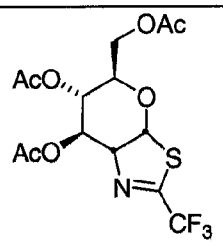
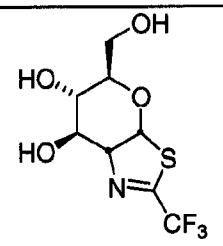
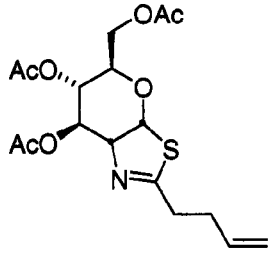
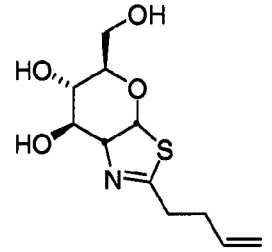
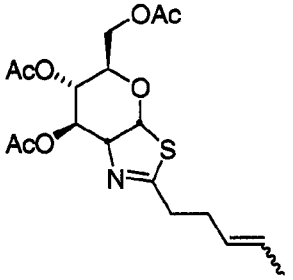
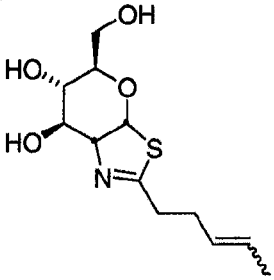
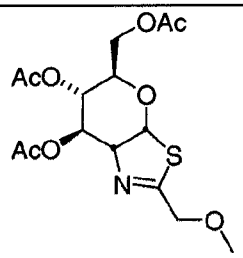
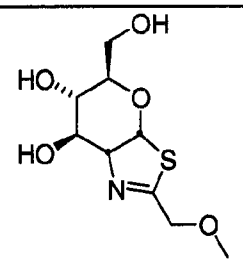
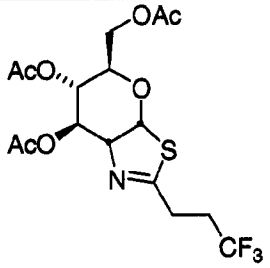
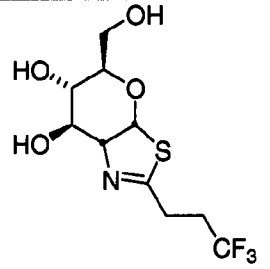
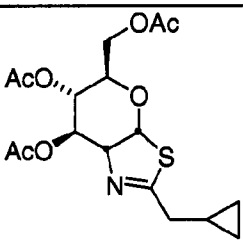
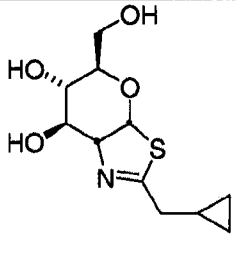
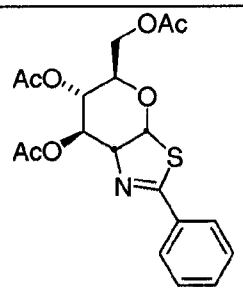
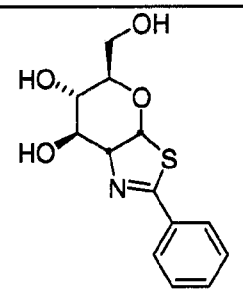
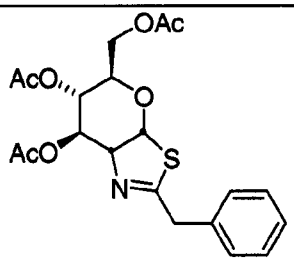
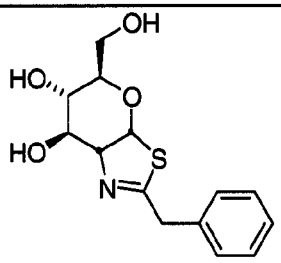
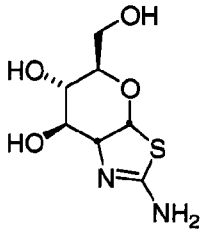
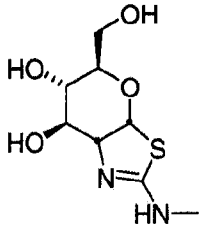
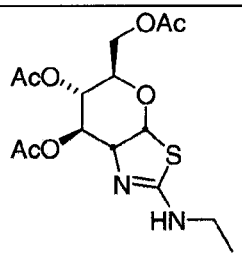
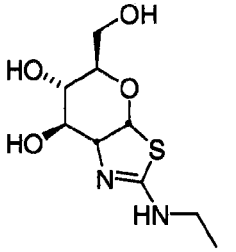
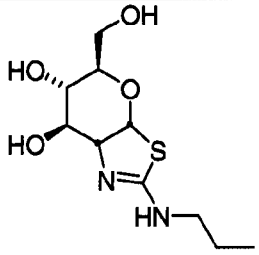
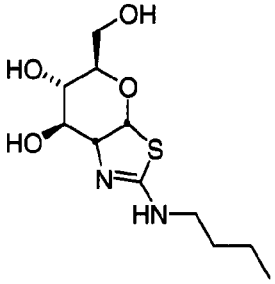
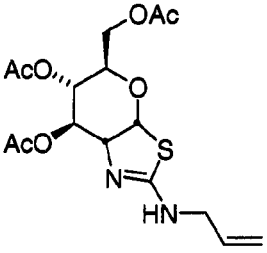
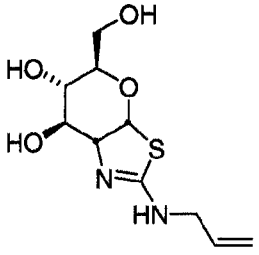
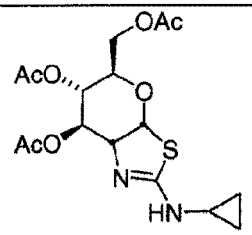
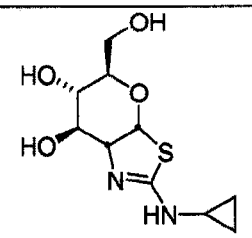
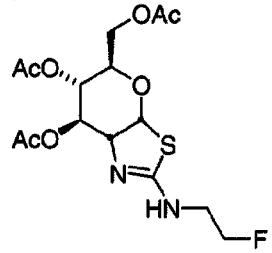
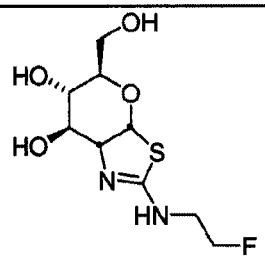
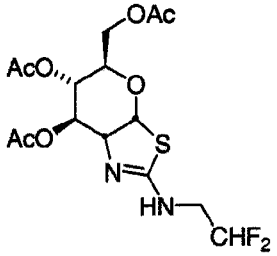
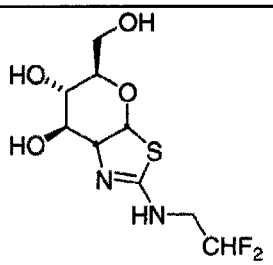
化合物	名称	结构
1	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(氟甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
2	(3aR, 5R, 6S, 7R, 7aR)-2-(氟甲基)-5-(羟基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
3	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(二氟甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
4	(3aR, 5R, 6S, 7R, 7aR)-2-(二氟甲基)-5-(羟基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	

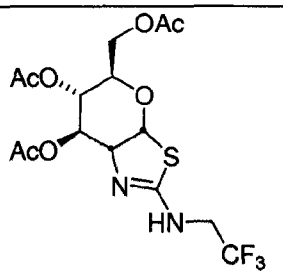
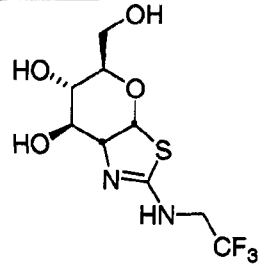
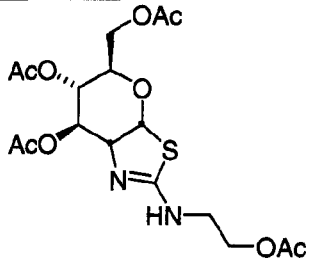
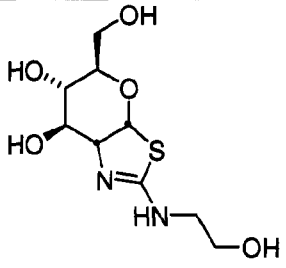
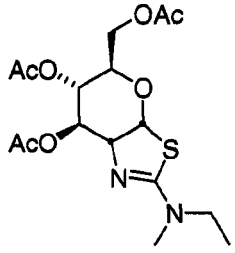
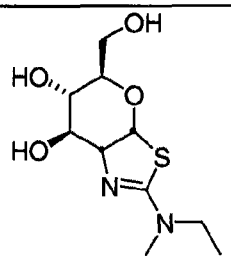
5	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(三氟甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
6	(3aR, 5R, 6S, 7R, 7aR)-5-(羟基甲基)-2-(三氟甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
7	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(丁-3-烯基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
8	(3aR, 5R, 6S, 7R, 7aR)-2-(丁-3-烯基)-5-(羟基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
9	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(E, Z)-(戊-3-烯基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
10	(3aR, 5R, 6S, 7R, 7aR)-5-(羟基甲基)-2-(E, Z)-(戊-3-烯基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	

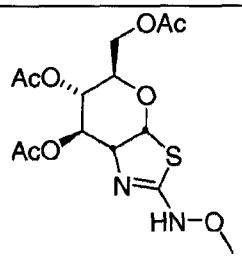
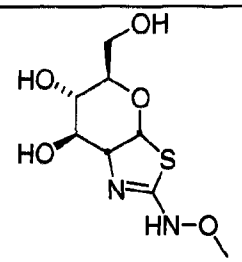
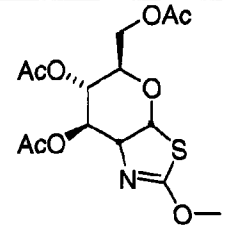
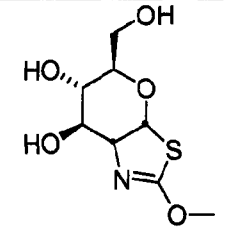
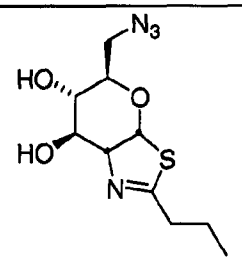
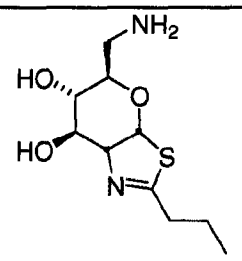
11	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(甲氧基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
12	(3aR, 5R, 6S, 7R, 7aR)-5-(羟基甲基)-2-(甲氧基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
13	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(3, 3, 3-三氟丙基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
14	(3aR, 5R, 6S, 7R, 7aR)-5-(羟基甲基)-2-(3, 3, 3-三氟丙基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
15	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(环丙基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
16	(3aR, 5R, 6S, 7R, 7aR)-2-(环丙基甲基)-5-(羟基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	

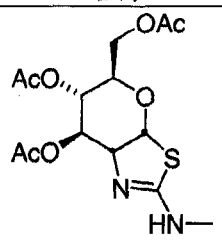
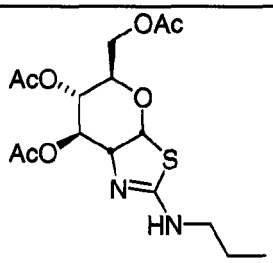
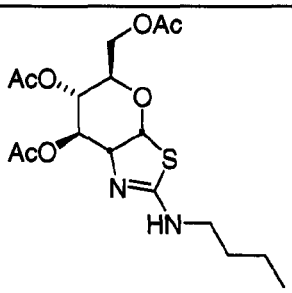
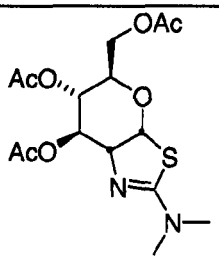
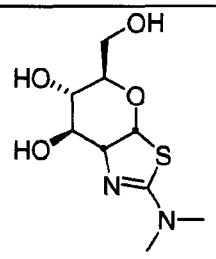
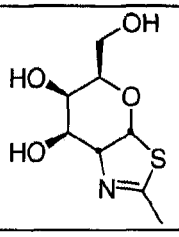
17	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-苯基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
18	(3aR, 5R, 6S, 7R, 7aR)-5-(羟基甲基)-2-苯基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
19	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-苄基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
20	(3aR, 5R, 6S, 7R, 7aR)-2-苄基-5-(羟基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
21	(3aR, 5R, 6S, 7R, 7aR)-2-氨基-5-(羟基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
23	(3aR, 5R, 6S, 7R, 7aR)-5-(羟基甲基)-2-(甲基氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	

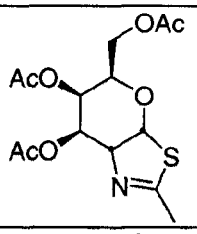
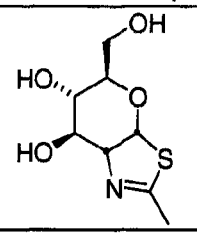
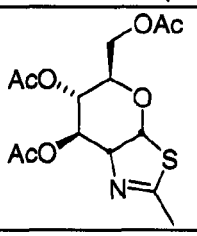
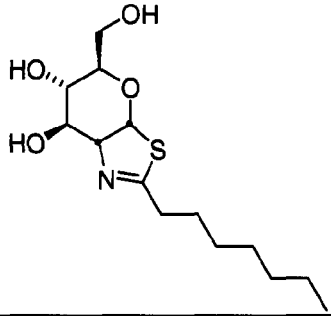
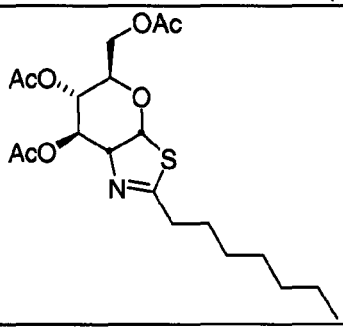
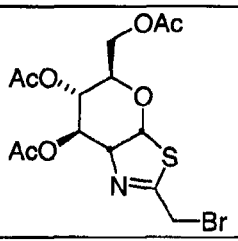
24	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(乙基氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
25	(3aR, 5R, 6S, 7R, 7aR)-2-(乙基氨基)-5-(羟基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
27	(3aR, 5R, 6S, 7R, 7aR)-5-(羟基甲基)-2-(丙基氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
29	(3aR, 5R, 6S, 7R, 7aR)-2-(丁基氨基)-5-(羟基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
30	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(烯丙基氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
31	(3aR, 5R, 6S, 7R, 7aR)-2-(烯丙基氨基)-5-(羟基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	

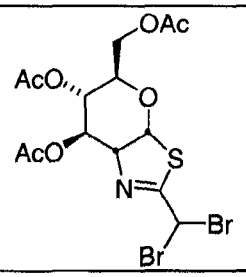
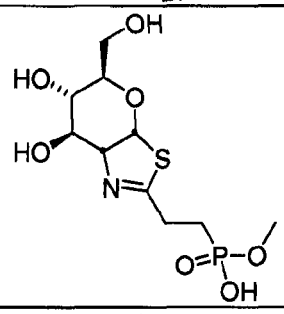
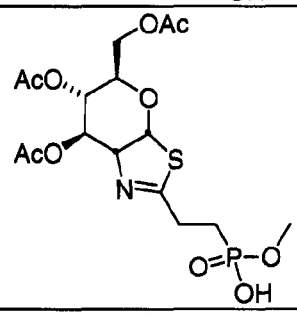
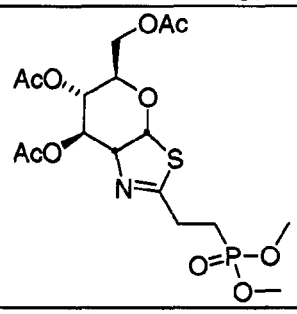
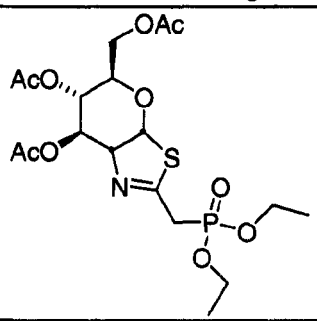
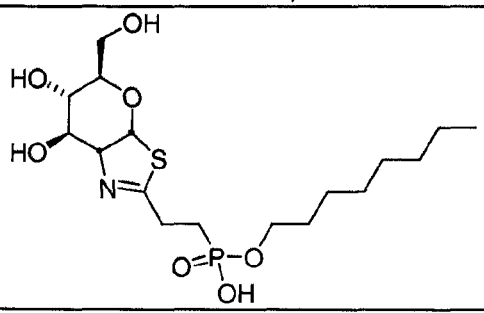
32	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(环丙基氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
33	(3aR, 5R, 6S, 7R, 7aR)-2-(环丙基氨基)-5-(羟基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
34	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(2-氟乙基氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
35	(3aR, 5R, 6S, 7R, 7aR)-2-(2-氟乙基氨基)-5-(羟基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
36	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(2, 2-二氟乙基氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
37	(3aR, 5R, 6S, 7R, 7aR)-2-(2, 2-二氟乙基氨基)-5-(羟基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	

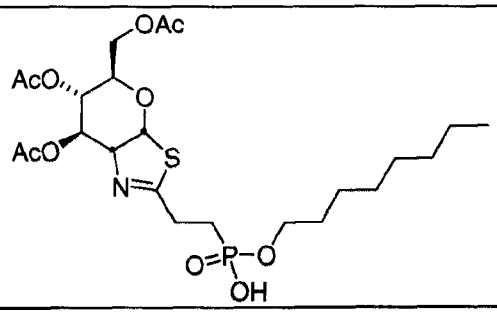
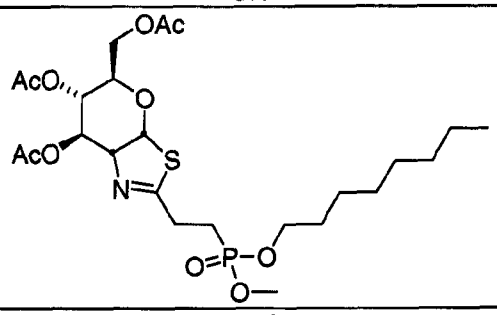
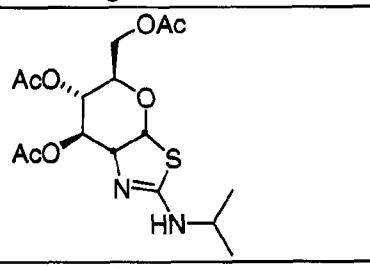
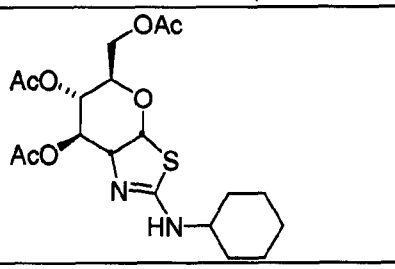
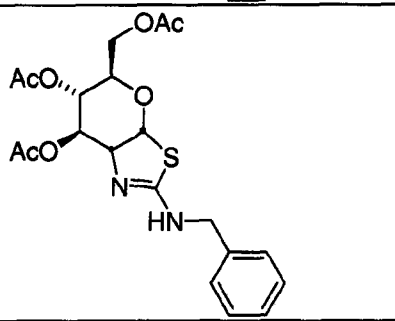
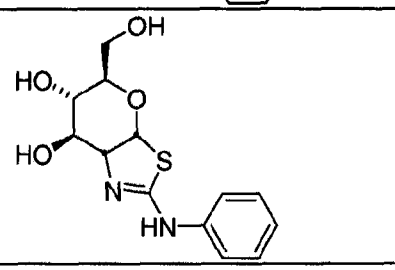
38	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(2, 2, 2-三氟乙基氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
39	(3aR, 5R, 6S, 7R, 7aR)-5-(羟基甲基)-2-(2, 2, 2-三氟乙基氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
40	二乙酸(3aR, 5R, 6S, 7R, 7aR)-2-(2-乙酰氧基乙基氨基)-5-(乙酰氧基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
41	(3aR, 5R, 6S, 7R, 7aR)-2-(2-羟基乙基氨基)-5-(羟基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
44	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(乙基(甲基)氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
45	(3aR, 5R, 6S, 7R, 7aR)-2-(乙基(甲基)氨基)-5-(羟基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	

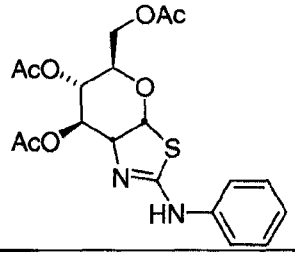
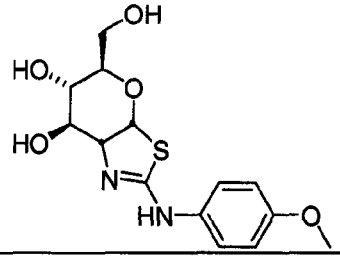
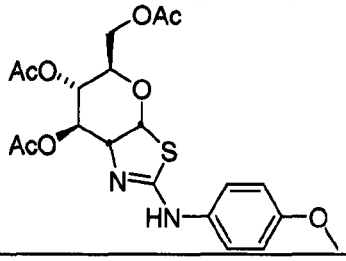
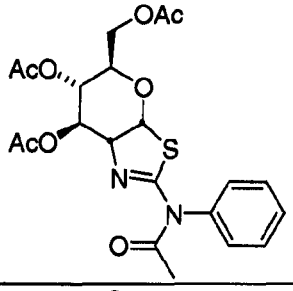
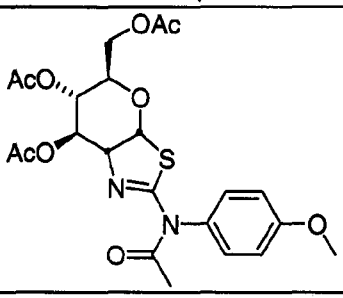
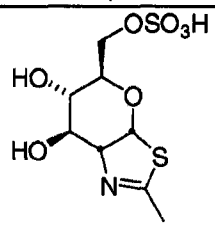
46	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(甲氧基氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
47	(3aR, 5R, 6S, 7R, 7aR)-5-(羟基甲基)-2-(甲氧基氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
48	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-甲氧基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
49	(3aR, 5R, 6S, 7R, 7aR)-5-(羟基甲基)-2-甲氧基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
50	(3aR, 5R, 6S, 7R, 7aR)-5-(叠氮基甲基)-2-丙基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
51	(3aR, 5R, 6S, 7R, 7aR)-5-(氨基甲基)-2-丙基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	

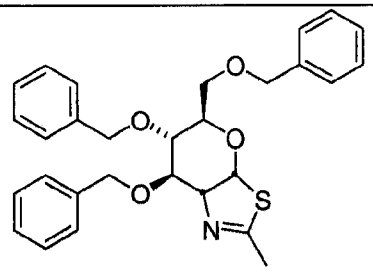
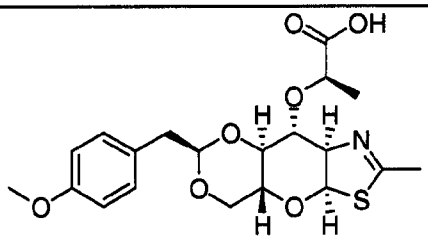
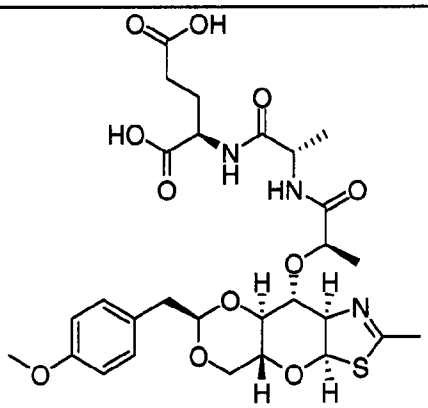
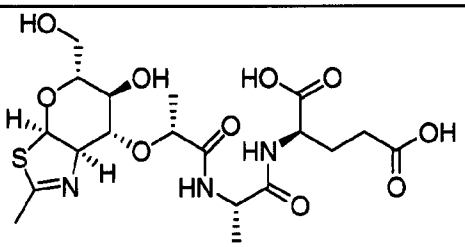
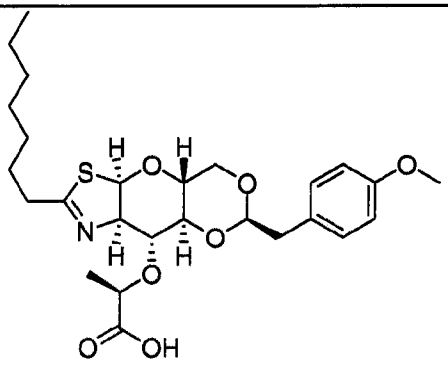
化合物	名称	结构
22	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(甲基氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
26	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(丙基氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
28	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(丁基氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
42	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(二甲基氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
43	(3aR, 5R, 6S, 7R, 7aR)-2-(二甲基氨基)5-(羟基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
52	(3aR, 5R, 6R, 7R, 7aR)-5-(羟基甲基)-2-甲基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	

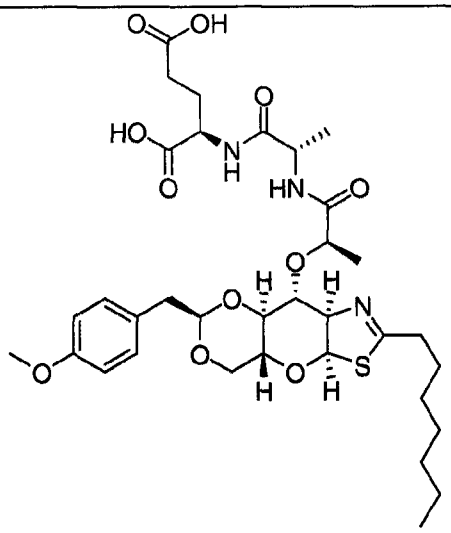
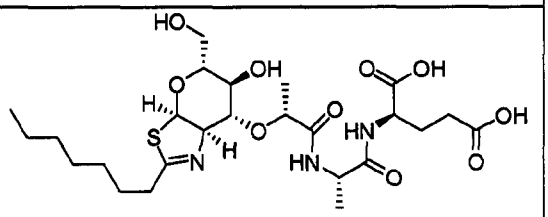
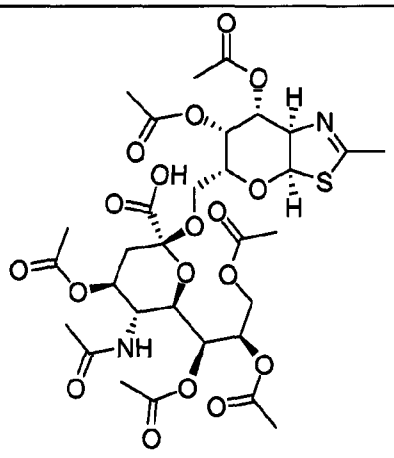
53	二乙酸(3aR, 5R, 6R, 7R, 7aR)-5-(乙酰氧基甲基)-2-甲基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
54	(3aR, 5R, 6S, 7R, 7aR)-5-(羟基甲基)-2-甲基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
55	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-甲基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
56	(3aR, 5R, 6S, 7R, 7aR)-2-庚基-5-(羟基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
57	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-庚基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
58	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(溴甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	

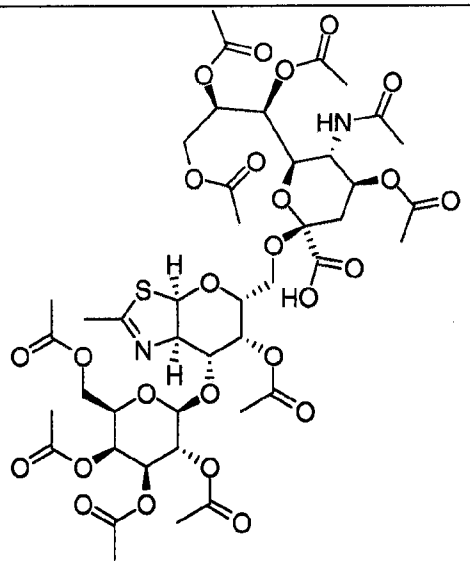
59	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(二溴甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
60	2-(3aR, 5R, 6S, 7R, 7aR)-6, 7-二羟基-5-(羟基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-2-基)乙基磷酸氢甲酯	
61	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(2-(羟基(甲氧基)磷酰基)乙基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
62	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(2-(二甲氧基磷酰基)乙基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
63	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-((二乙氧基磷酰基)甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
64	2-(3aR, 5R, 6S, 7R, 7aR)-6, 7-二羟基-5-(羟基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-2-基)乙基磷酸氢辛酯	

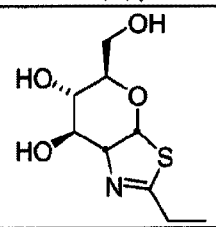
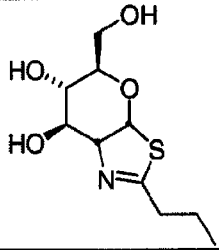
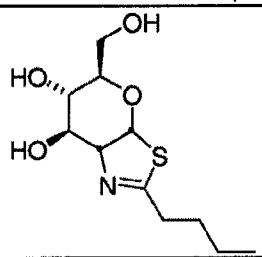
65	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(2-(羟基(辛氧基)磷酰基)乙基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
66	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(2-(甲氧基(辛氧基)磷酰基)乙基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
67	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(异丙基氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
68	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(环己基氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
69	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(苄基氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
70	(3aR, 5R, 6S, 7R, 7aR)-5-(羟基甲基)-2-(苯基氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	

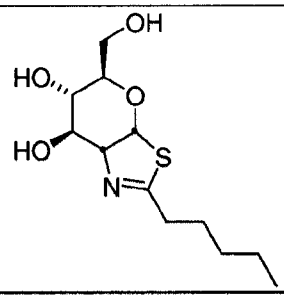
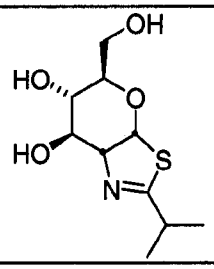
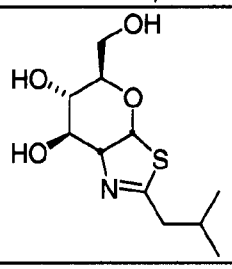
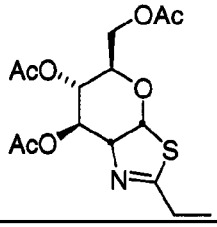
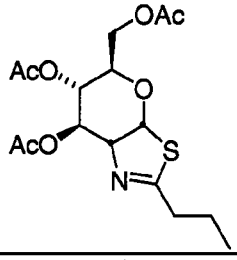
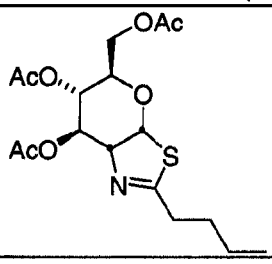
71	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(苯基氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
72	(3aR, 5R, 6S, 7R, 7aR)-5-(羟基甲基)-2-(4-甲氧基苯基氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
73	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(4-甲氧基苯基氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
74	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(N-苯基乙酰氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
75	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-(N-(4-甲氧基苯基)乙酰氨基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
76	((3aR, 5R, 6S, 7R, 7aR)-6, 7-二羟基-2-甲基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-5-基)甲基硫酸氢酯	

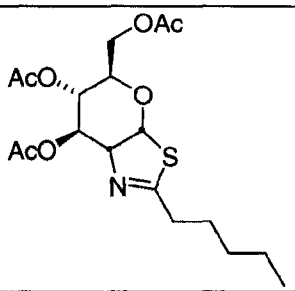
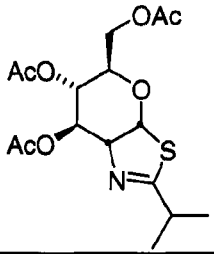
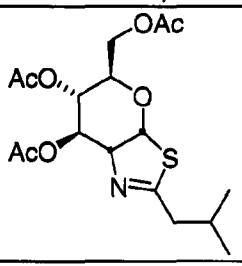
77	(3aR, 5R, 6S, 7R, 7aR)-6, 7-双(苄氧基)-5-(苄氧基甲基)-2-甲基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑	
78	(2R)-2-[[(3aR, 4aR, 7R, 8aS, 9R, 9aR)-3a, 4a, 5, 8a, 9, 9a-六氢-7-[(4-甲氧基苯基)甲基]-2-甲基[1, 3]二噁英并[4′, 5′: 5, 6]吡喃并[3, 2-d]噻唑-9-基]氧基]-丙酸	
79	N-[(2R)-2-[[(3aR, 4aR, 7R, 8aS, 9R, 9aR)-3a, 4a, 5, 8a, 9, 9a-六氢-7-[(4-甲氧基苯基)甲基]-2-甲基[1, 3]二噁英并[4′, 5′: 5, 6]吡喃并[3, 2-d]噻唑-9-基]氧基]-1-氧代丙基]-L-丙氨酰-D-谷氨酸	
80	N-[(2R)-1-氧代-2-[[(3aR, 5R, 6S, 7R, 7aR)-3a, 6, 7, 7a-四氢-6-羟基-5-(羟甲基)-2-甲基-5H-吡喃并[3, 2-d]噻唑-7-基]氧基]丙基]-L-丙氨酰-D-谷氨酸	
81	(2R)-2-[[(3aR, 4aR, 7R, 8aS, 9R, 9aR)-2-庚基-3a, 4a, 5, 8a, 9, 9a-六氢-7-[(4-甲氧基苯基)甲基][1, 3]二噁英并[4′, 5′: 5, 6]吡喃并[3, 2-d]噻唑-9-基]氧基]-丙酸	

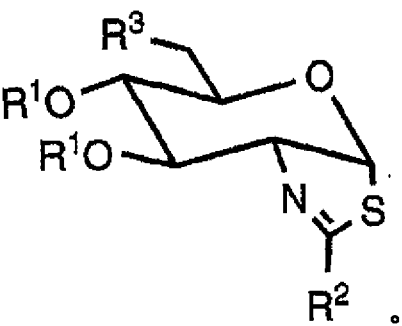
82	N-[(2R)-2-[[(3aR, 4aR, 7R, 8aS, 9R, 9aR)-2-庚基-3a, 4a, 5, 8a, 9, 9a-六氢-7-[(4-甲氧基苯基)甲基][1, 3]二噁英并[4′, 5′: 5, 6]吡喃并[3, 2-d]噻唑-9-基]氧基]-1-氧代丙基]-L-丙氨酰-D-谷氨酸	
83	N-[(2R)-2-[[(3aR, 5R, 6S, 7R, 7aR)-2-庚基-3a, 6, 7, 7a-四氢-6-羟基-5-(羟甲基)-5H-吡喃并[3, 2-d]噻唑-7-基]氧基]-1-氧代丙基]-L-丙氨酰-D-谷氨酸	
84	N-乙酰基-2-O-[[(3aR, 5R, 6R, 7R, 7aR)-6, 7-双(乙酰氧基)-3a, 6, 7, 7a-四氢-2-甲基-5H-吡喃并[3, 2-d]噻唑-5-基]甲基]-α-神经氨酸4, 7, 8, 9-四乙酸酯	

85	N-乙酰基-2-O-[[(3aR, 5R, 6R, 7R, 7aR)-6-(乙酰氧基)-3a, 6, 7, 7a-四氢-2-甲基-7-[(2, 3, 4, 6-四-O-乙酰基-β-D-吡喃半乳糖基)氧基]-5H-吡喃并[3, 2-d]噻唑-5-基]甲基]-α-神经氨酸 4, 7, 8, 9-四乙酸酯	

化合物	名称	结构
86	(3aR, 5R, 6S, 7R, 7aR)-2-乙基-5-(羟基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
87	(3aR, 5R, 6S, 7R, 7aR)-5-(羟基甲基)-2-丙基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
88	(3aR, 5R, 6S, 7R, 7aR)-2-丁基-5-(羟基甲基)-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	

89	(3aR, 5R, 6S, 7R, 7aR)-5-(羟基甲基)-2-戊基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
90	(3aR, 5R, 6S, 7R, 7aR)-5-(羟基甲基)-2-异丙基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
91	(3aR, 5R, 6S, 7R, 7aR)-5-(羟基甲基)-2-异丁基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二醇	
92	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-乙基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
93	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-丙基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
94	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-丁基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	

95	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-戊基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
96	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-异丙基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	
97	二乙酸(3aR, 5R, 6S, 7R, 7aR)-5-(乙酰氧基甲基)-2-异丁基-5, 6, 7, 7a-四氢-3aH-吡喃并[3, 2-d]噻唑-6, 7-二基酯	


R3
R1O
R1O
O
N
S
R2

Aricept®

Razadyne®

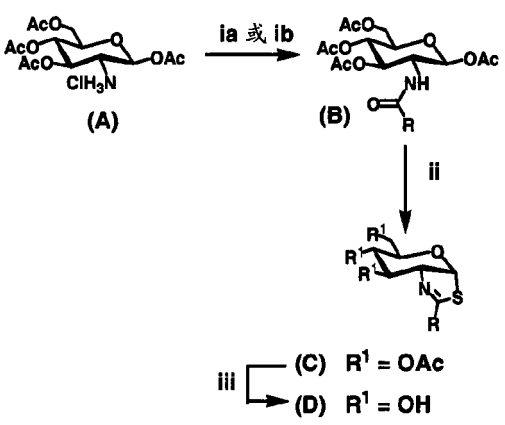
ER® , Reminyl® ,

Nivalin®,

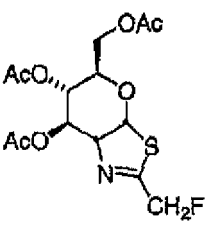
Namenda®

Axura®, Akatinol®, Ebixa®,

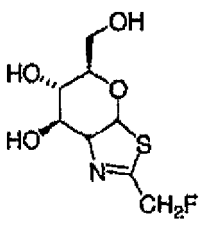
Avandia®



ia) RCOCl, Et_3N, CH_2Cl_2, 0 ºC; ib) EDC 或 DCC, RCOOH ii) Lawesson 试剂, Tol, Δ; iii) a) NaOMe, MeOH, b) AcOH, MeOH



1



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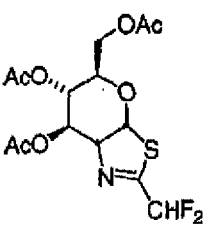

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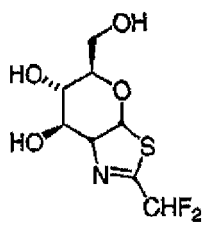

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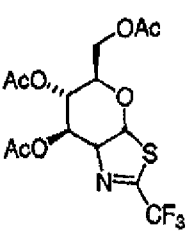

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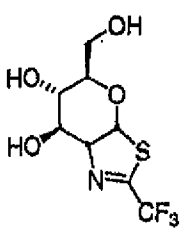

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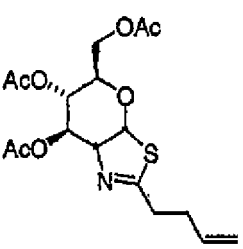

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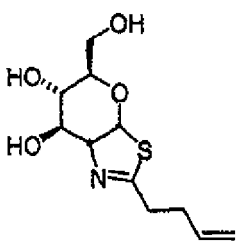

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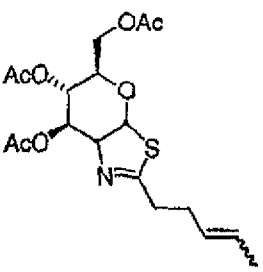

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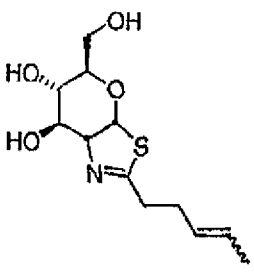

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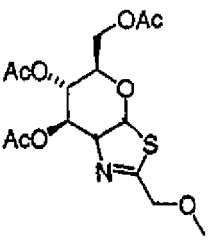

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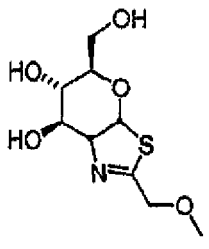

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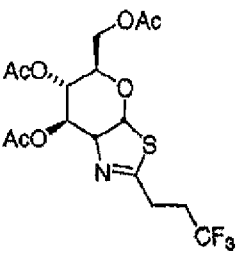

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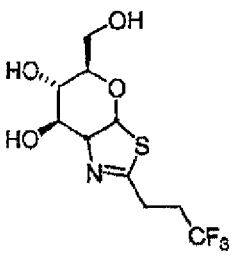

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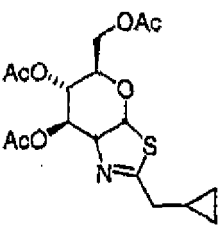

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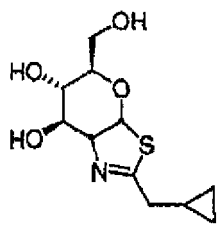

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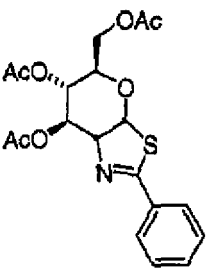

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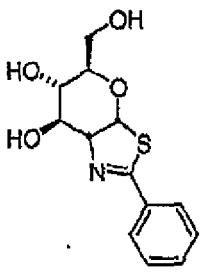

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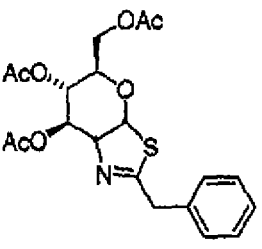

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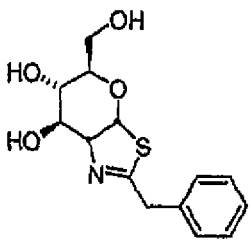

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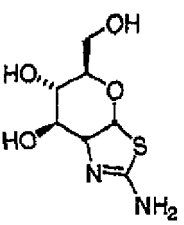

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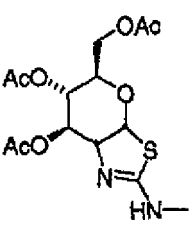

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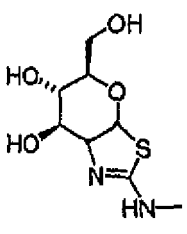

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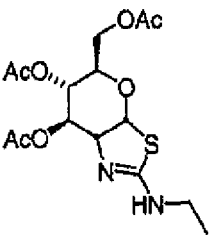

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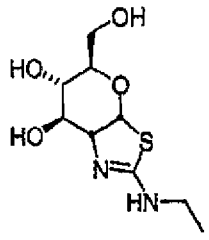

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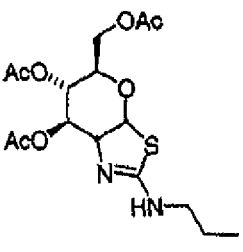

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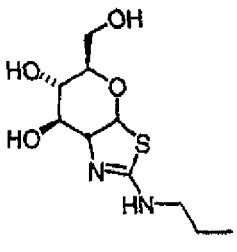

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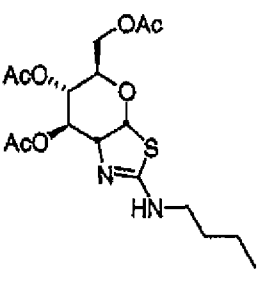

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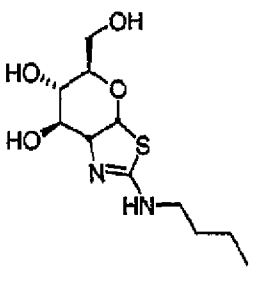

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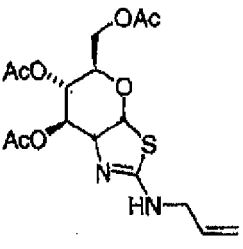

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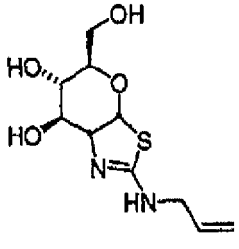

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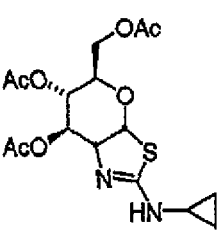

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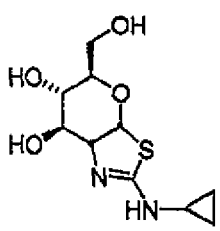

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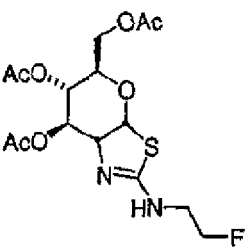

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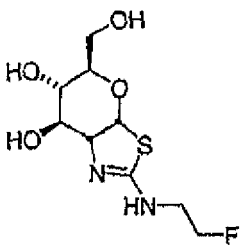

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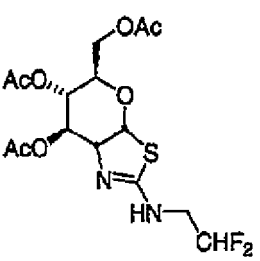

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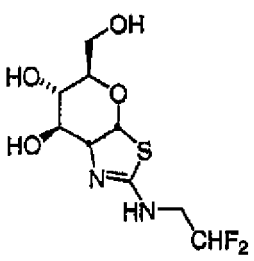

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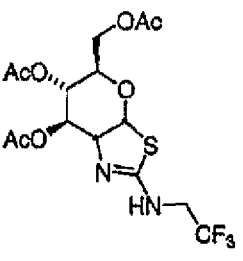

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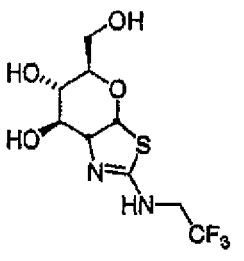

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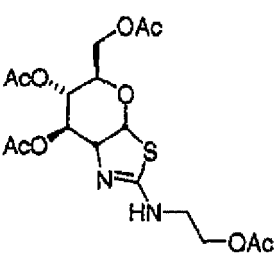

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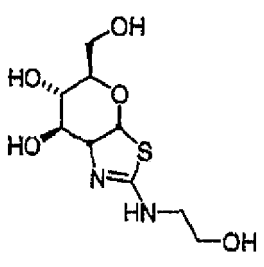

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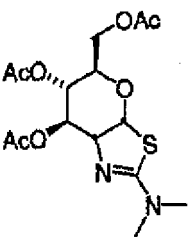

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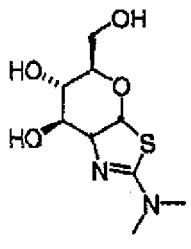

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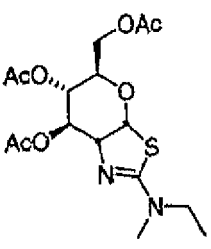

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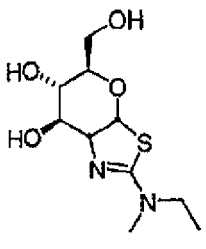

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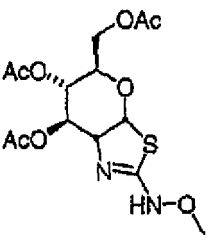

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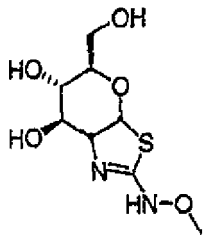

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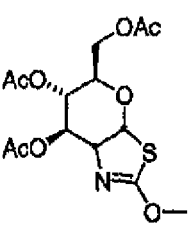

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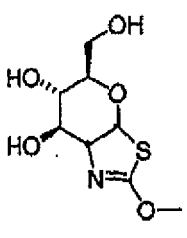

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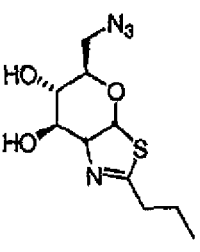

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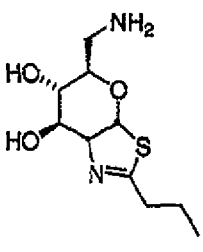


51

2	10
4	7.7
6	5.6

CBC/血清测量	未处理的(n=4只大鼠)		处理的(n=4只大鼠)	
	平均值	sd	平均值	sd
非酯化脂肪酸(mM)	1.8	0.6	1.8	0.8
红细胞计数(L-1)	9.3	1.0	10.1	0.7
白细胞计数(1e9/L)	4.5	1.7	3.8	0.8
淋巴细胞%	88.3	3.3	82.3	6.8
单核细胞%	4.3	2.2	4.3	1.9
多形核细胞%	7.5	2.4	10.8	5.0
血红蛋白(g/L)	157.8	13.4	169.5	10.3
血细胞比容(1/1)	0.5	0.0	0.5	0.0
平均红细胞体积(fL)	53.8	1.5	53.3	1.3
平均红细胞血红蛋白(pg)	16.9	0.6	16.9	0.6
平均红细胞血红蛋白浓度(g/l)	314.5	6.0	318.5	4.4
RDW	16.6	1.5	17.4	0.8
血小板计数(10e9/L)	441.8	173.0	561.8	360.0
平均血小板体积(fL)	11.5	2.1	9.3	2.3
葡萄糖(mM)	1.9	0.6	2.0	1.0
血尿素氮(mM)	8.1	2.4	8.9	0.8

肌酸酐(μM)	23.8	11.0	29.0	9.1
钠(mM)	147.0	0.8	145.8	2.1
钾(mM)	6.4	0.6	5.9	0.6
钙(mM)	2.7	0.0	2.7	0.1
磷(mM)	2.3	0.2	2.2	0.2
总蛋白(g/l)	78.0	2.7	78.0	4.5
白蛋白(g/l)	49.8	1.5	47.8	4.7
球蛋白(g/l)	28.3	2.5	30.3	1.0
白蛋白/球蛋白	1.8	0.2	1.6	0.2
总胆红素(μM)	0.0	0.0	0.0	0.0
碱性磷酸酶(iu/l)	152.5	28.2	168.3	27.8
AST (iu/l)	255.8	56.2	202.3	37.9
γ gt(iu/l)	12.0	4.3	17.5	4.2
氯化物(mM)	106.0	0.0	104.5	1.9
二氧化碳(mM)	15.8	1.3	17.5	1.3
摩尔渗透压浓度(mmol/Kg)	295.3	3.5	292.9	3.4
阴离子间隙	31.8	1.7	29.8	2.2
肌酸酐磷酸激酶(iu/l)	1591.0	325.5	1324.5	321.6
ALT (iu/l)	124.3	29.5	109.3	18.4
山梨醇脱氢酶(iu/l)	15.8	7.6	22.3	7.3
胆固醇(mM)	1.9	0.3	2.9	0.6
甘油三酯(mM)	1.8	0.5	2.7	1.4

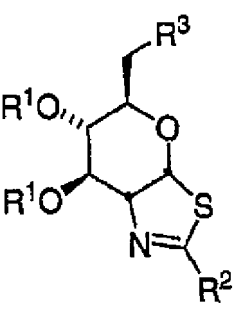
尿测量	未处理的（-）				处理的（+）		
SP.GRV.	**1.06**	**1.05**	**1.05**	**1.05**	**1.042**	**1.046**	**1.036**
外观	清澈	**slcld**	清澈	**slcld**	混浊	混浊	清澈
颜色	黄色	黄色	灰白色	黄色	黄色	黄色	黄色
蛋白质（g/L）	痕量	**1**	痕量	痕量	**1**	阴性	阴性
葡萄糖	阴性	阴性	阴性	阴性	阴性	阴性	阴性
血液	**2+**	痕量	阴性	**1+**	**2+**	阴性	**2+**
胆红素	阴性	阴性	阴性	阴性	阴性	阴性	阴性
尿胆素原	正常	正常	正常	正常	正常	正常	正常
WBC	**0-3**	**0-3**	阴性	阴性	**0-3**	阴性	阴性
RBC	**6.0-10**	**0-3**	**0-3**	**0-3**	**0-3**	**0-3**	阴性
上皮细胞	很少	很少	很少	阴性	阴性	阴性	阴性
透明管型	阴性	阴性	阴性	阴性	阴性	阴性	阴性

颗粒型	阴性	阴性	阴性	阴性	阴性	阴性	阴性
RBC 型	阴性	阴性	阴性	阴性	阴性	阴性	阴性
细菌	阴性	阴性	阴性	阴性	中度	阴性	阴性
粘液	阴性	很少	阴性	阴性	阴性	很少	阴性
结晶	**PO4**	**PO4**	**PO4**	**PO4**	**PO4**	**PO4**	
量	很多	中度	很少	很多	很多	很多	

CBC/血清测量	组E 未处理的(-) (n=4只小鼠)		组F2 **NAG-Bt**处理的 (n=2只小鼠)		组F1 **NAG-AE** 处理的 (n=4只小鼠)	
	平均值	sd	平均值	sd	平均值	sd
血液学						
白细胞计数(1e9/L)	3.3	1.3	1.8	0.3	3.0	0.9
分化						
嗜酸性粒细胞%	0	-	3	3	2	3
中性粒细胞%	7	3	37	33	6	3
淋巴细胞%	91	3	52	32	86	6
单核细胞%	3	3	8	2	6	2
形态学						
血小板	适度		适度		适度	
RBC形态	正常		正常		正常	
手动pcv L/L	0.45	0.01	0.42	0.02	0.44	0.02
化学						
葡萄糖(mM)	0.8	-	1.5	0.2	1.3	0.9
血尿素氮(mM)	7	3	6.3	0.2	6	3
肌酸酐(μM)	35	24	6.2	0.4	13	6
Bun/Cr比	87	59	256	9	114	68
钠(mM)	122	25	136	24	148	13
钾(mM)	13	2	13	2	15	4

Na/K比	9.0	0.7	10.5	0.5	11	2
氯化物(mM)	89	20	100	17	112	13
二氧化碳(mM)	0.6	0.3	0.75	0.05	1.3	0.7
阴离子间隙	46	7	49	9	50	4
钙(mM)	2.6	0.2	2.5	0.1	2.4	0.2
磷(mM)	7	3	6.2	1.6	6.7	1.3
总蛋白(g/l)	70	33	72	3	76	5
白蛋白(g/l)	29	13	33	11	38	8
球蛋白(g/l)	41	20	39	9	38	11
白蛋白/球蛋白比	0.8	0.2	1	0.5	1.3	0.8
碱性磷酸酶(IU/L)	54	31	70	13	116	43
AST (IU/L)	272	136	250	93	201	62
γ gt(IU/L)	37	25	39	15	30	9
肌酸酐磷酸激酶(IU/L)	2448	1236	1452	776	1981	1229
摩尔渗透压浓度(mmol/Kg)	204	-	286	48	142	143
ALT (IU/L)	18	1.3	26	11	15	1
山梨醇脱氢酶(IU/L)	297	24	184	71	234	99

尿测量值	组 E 未处理的（-） （n=3 只小鼠，合并）	组 F2 处理的（NAG-Bt） （n=2 只小鼠，合并）	组 F1 处理的（NAG-AE） （n=3 只小鼠，合并）
SP.GRV.	1.050	1.05	1.039
外观	清澈	清澈	稍混浊
颜色	黄色	黄色	黄色
蛋白质（g/L）	阴性	阴性	阴性
葡萄糖	阴性	阴性	阴性
酮	阴性	阴性	阴性
血液	4+	NSQ	阴性
胆红素	阴性	阴性	阴性
尿胆素原	正常	正常	正常
WBC	0-3	阴性	阴性
RBC	6-10	阴性	阴性
上皮细胞	很少	很少	很少
杆菌	阴性	阴性	阴性
球菌	阴性	阴性	阴性
pH	5	5	6
尿肌酸酐	5693.6	7790.9	3105.4



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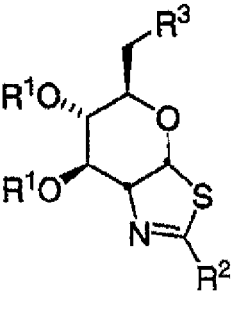

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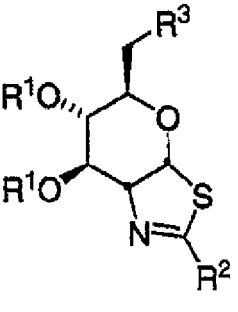

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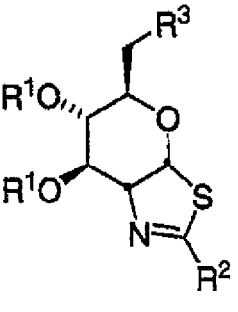

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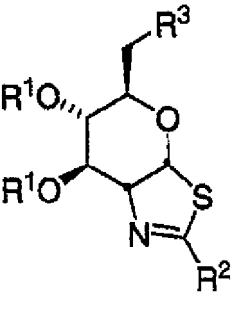

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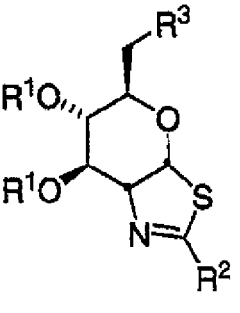

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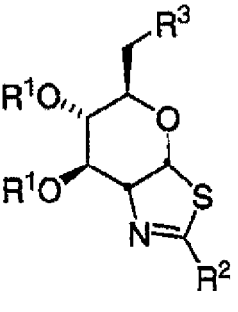

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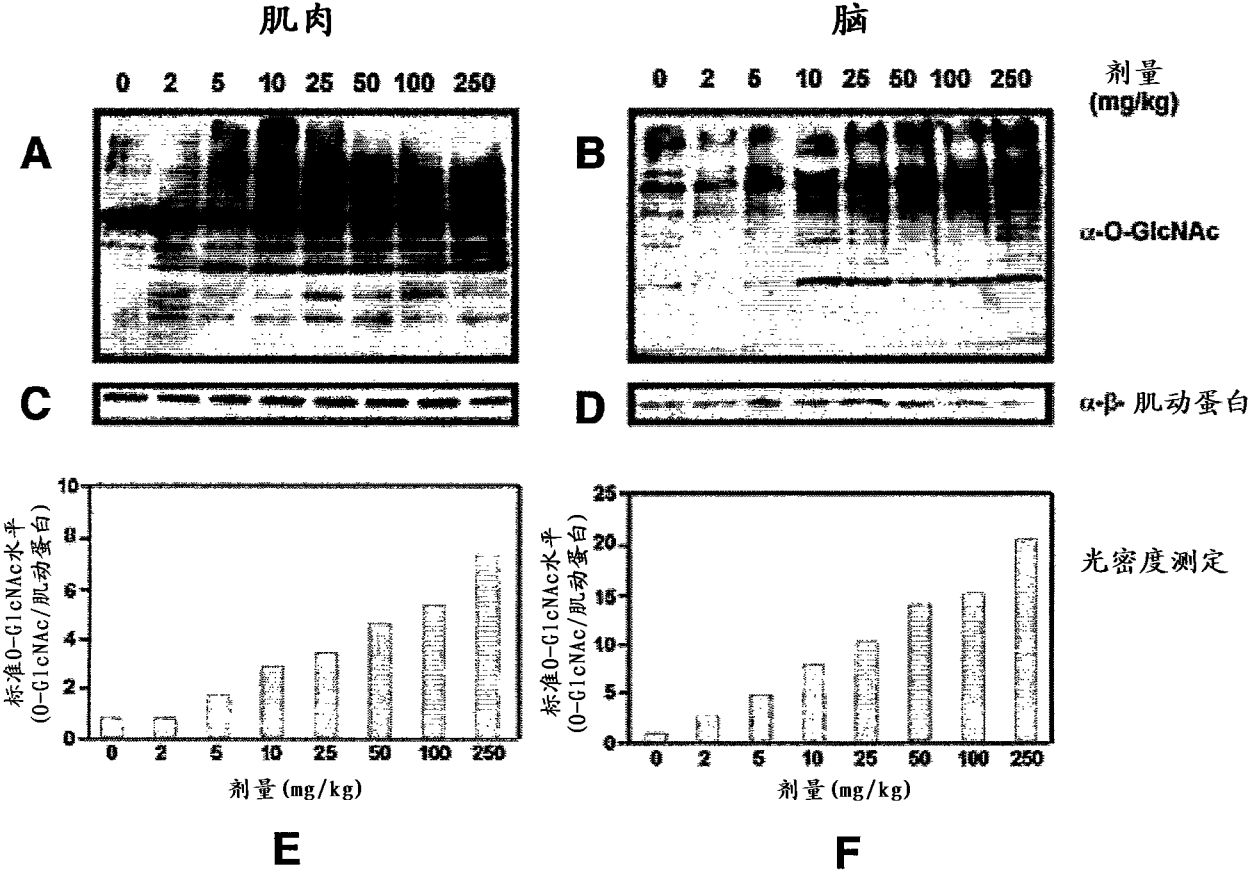
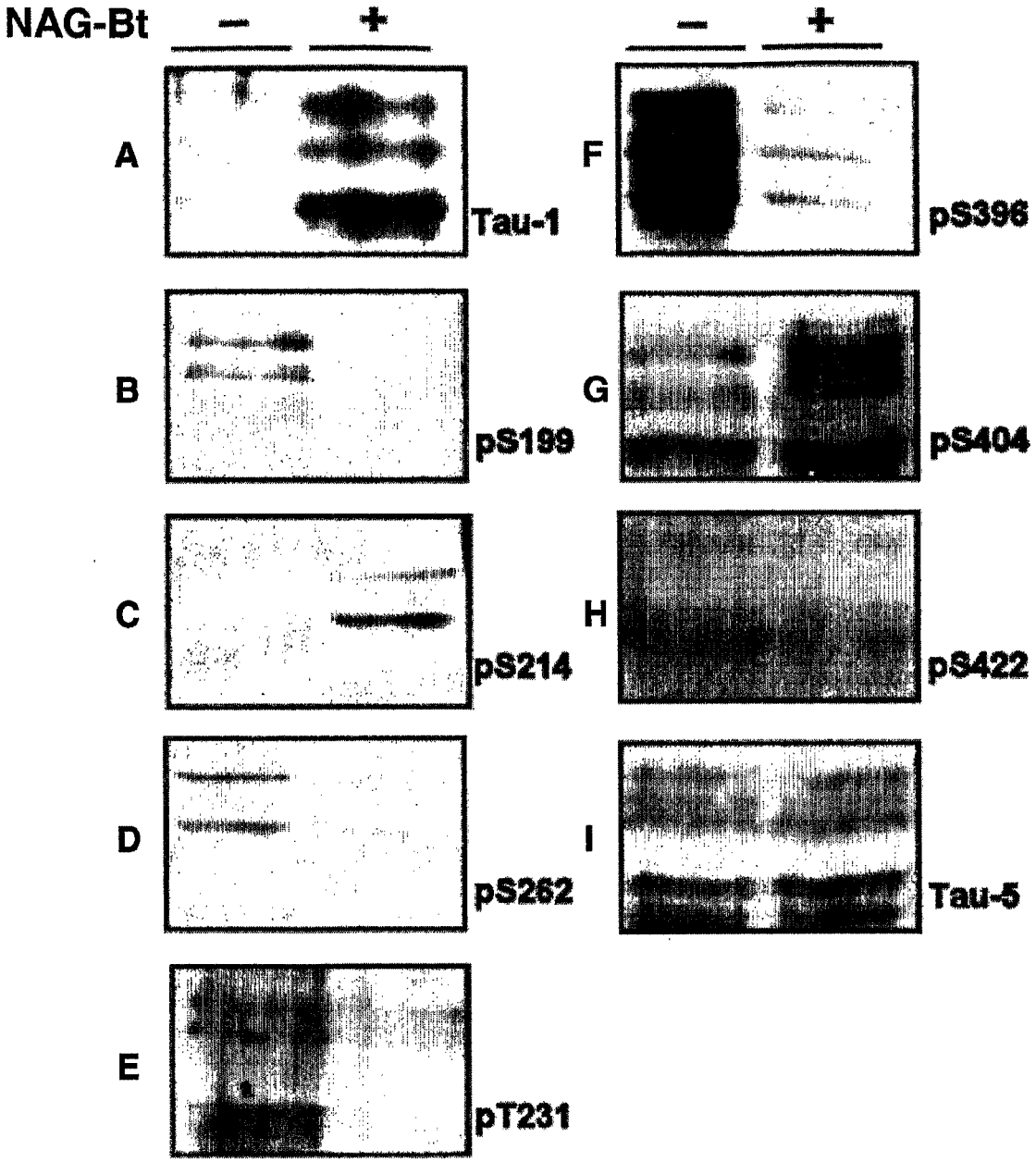
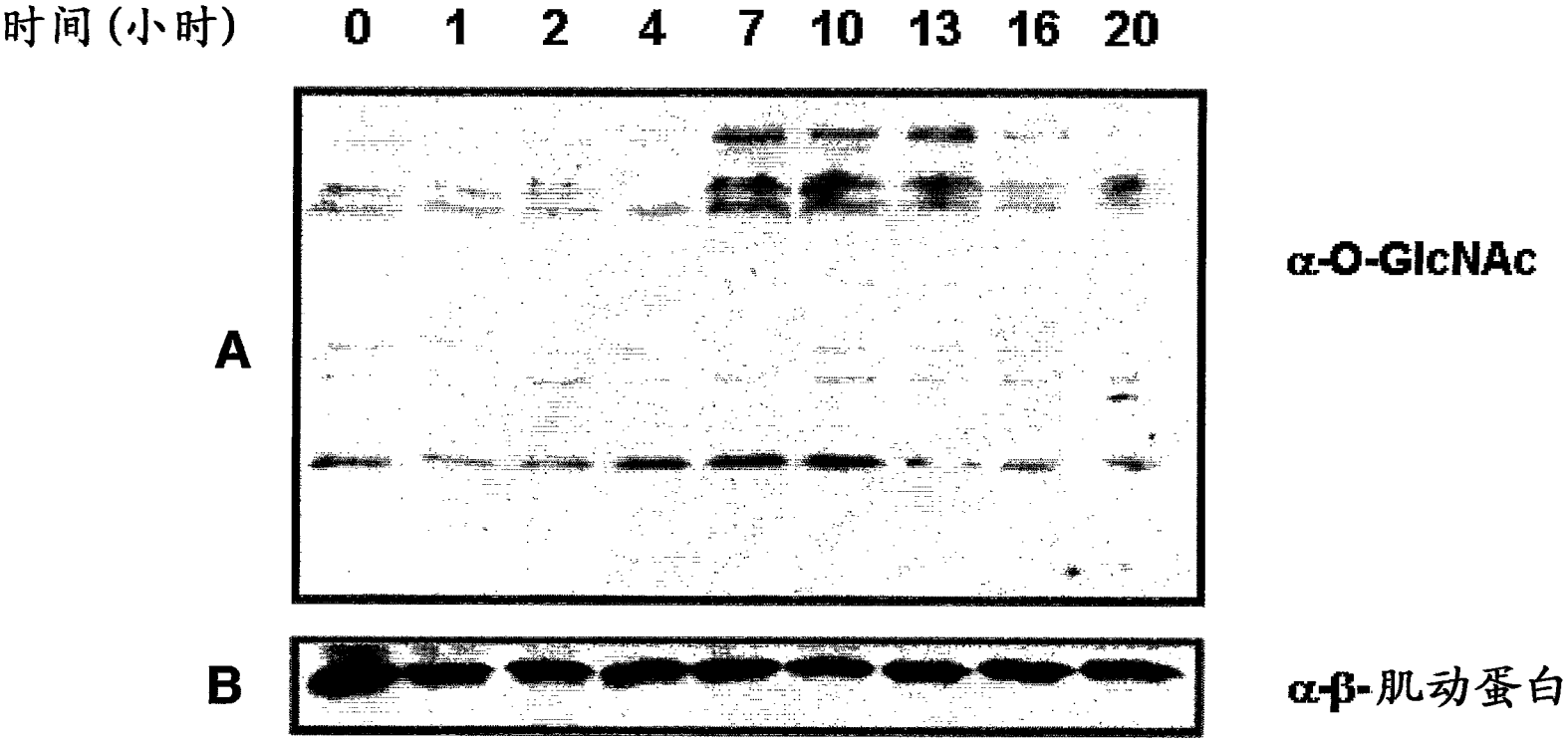
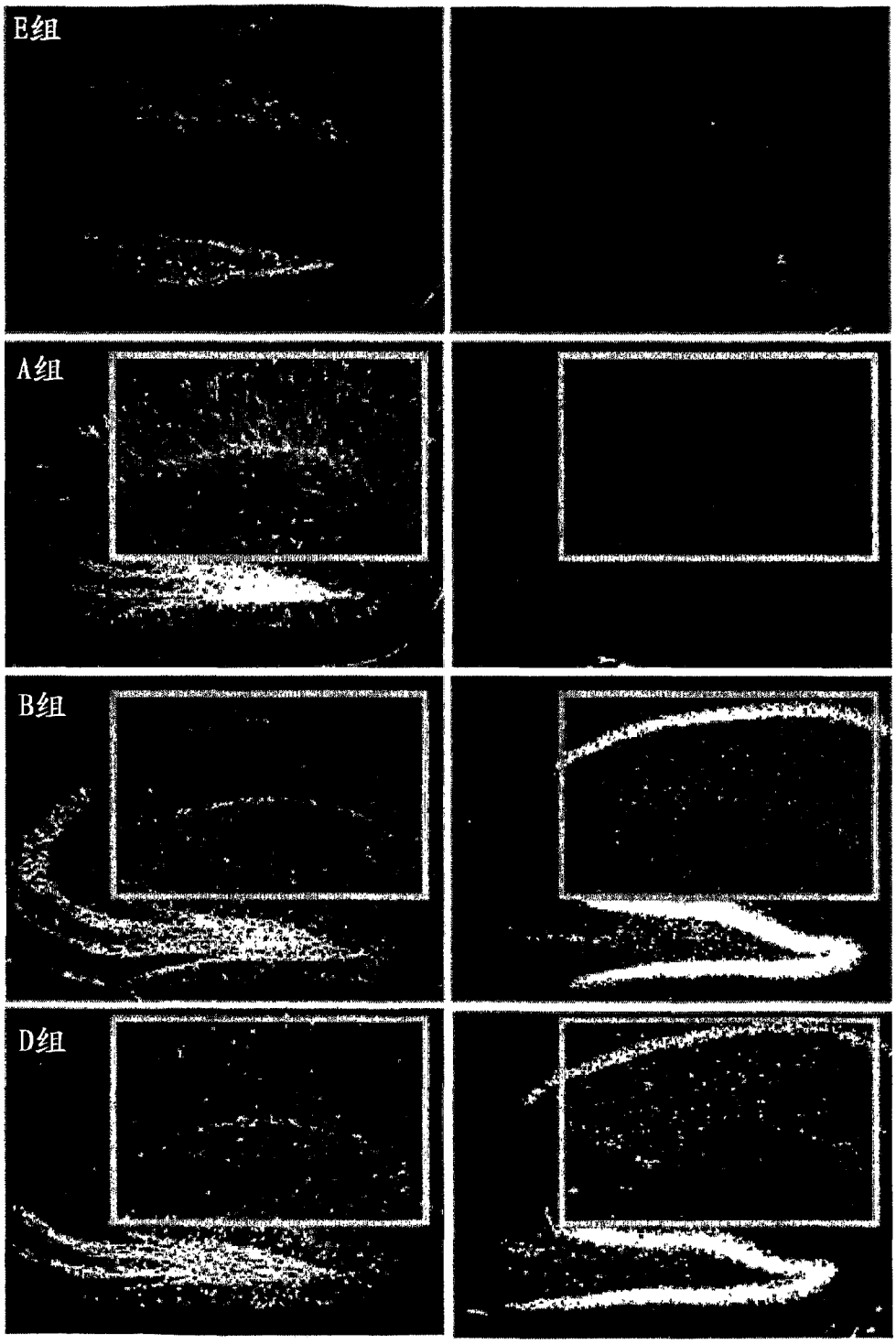
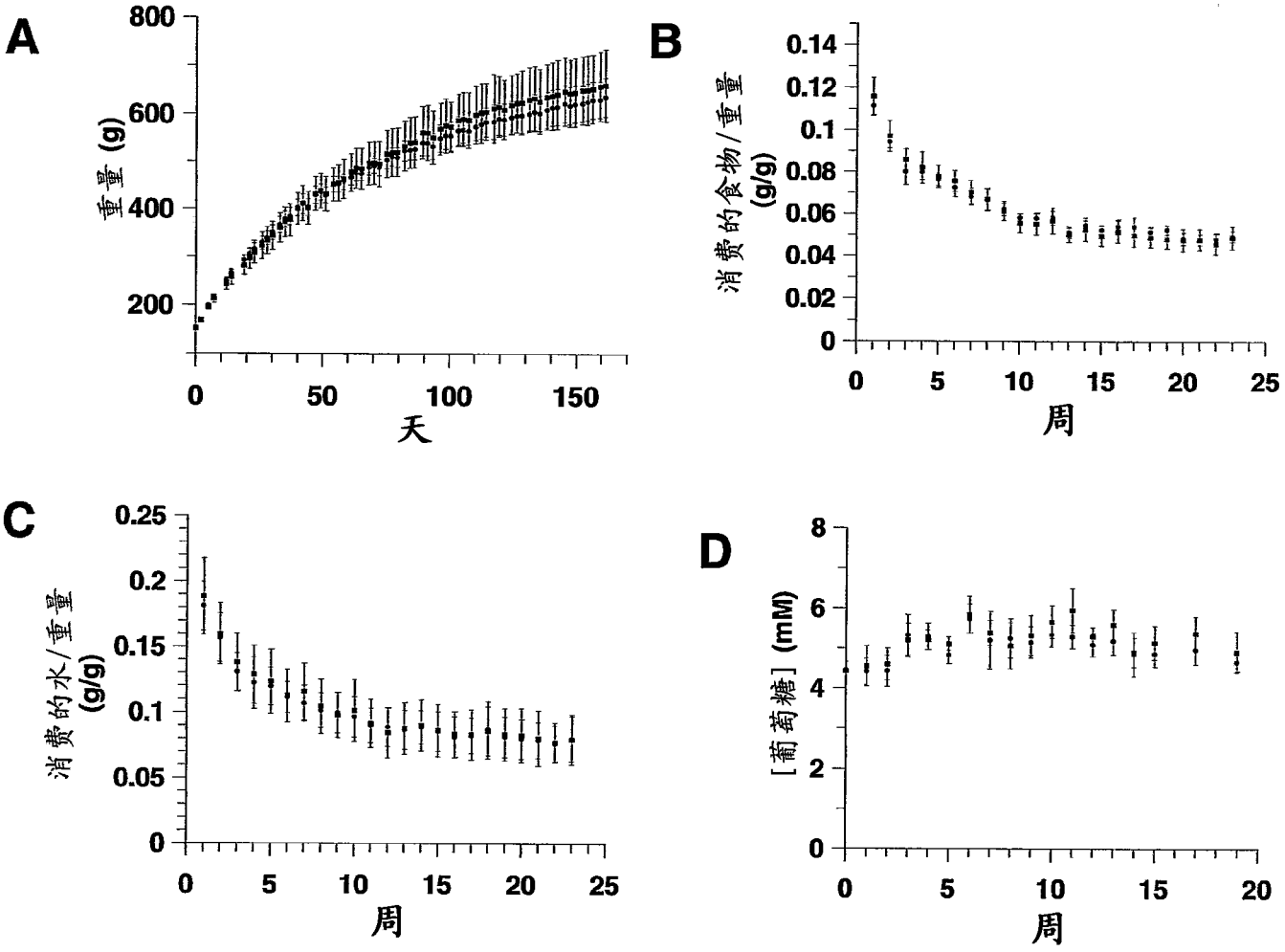

肌肉
脑
0 2 5 10 25 50 100 250
剂量
(mg/kg)
A
B
α-O-GlcNAc
C
D
α-β- 肌动蛋白
标准O-GlcNAc水平
(O-GlcNAc/肌动蛋白)
光密度测定
剂量(mg/kg)
E
F

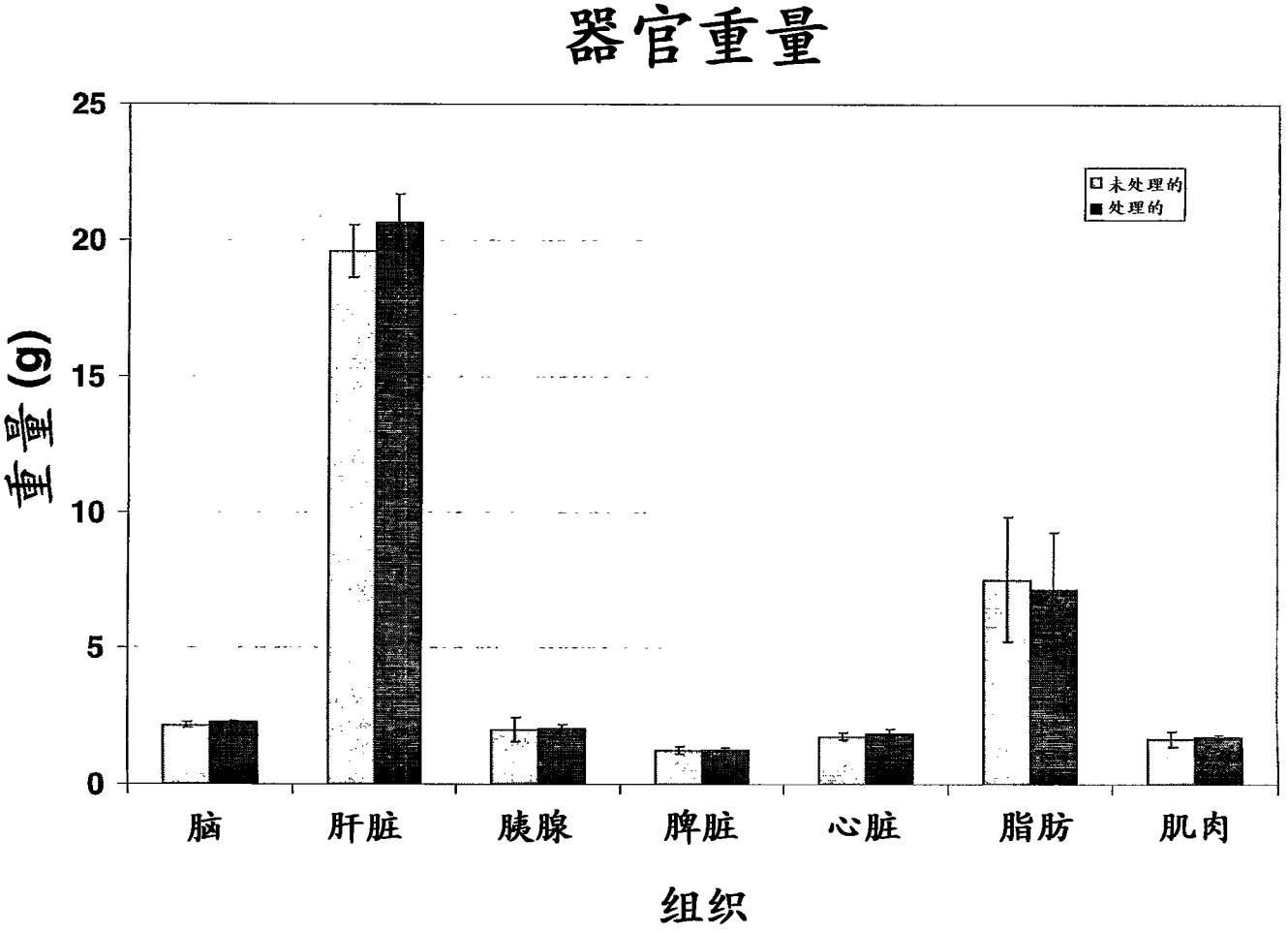

NAG-Bt
–
+
–
+
A
Tau-1
F
pS396
B
pS199
G
pS404
C
pS214
H
pS422
D
pS262
I
Tau-5
E
pT231

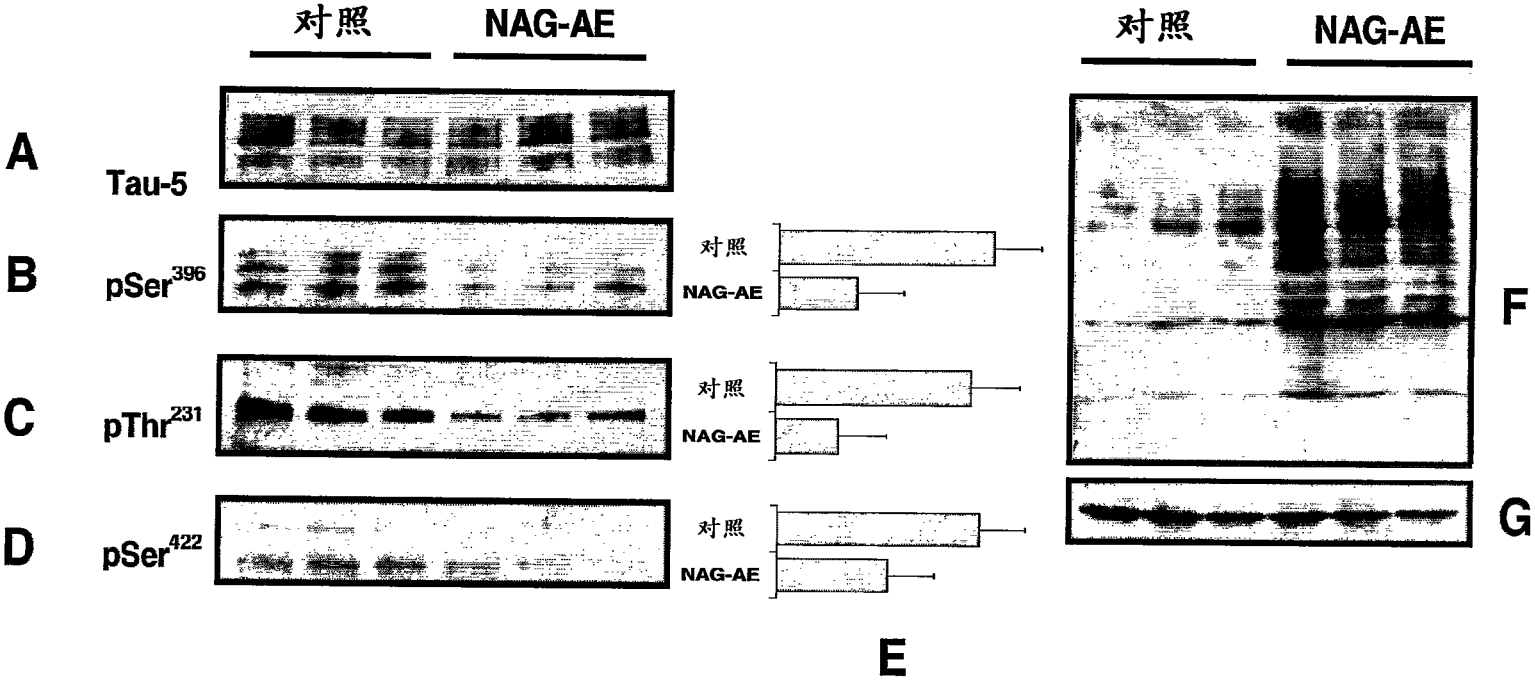
大鼠心脏组织中O-GlcNAc水平




E组
A
E
A组
B
F
B组
C
G
D组
D
H


A
800
600
400
200
重量 (g)
0
50
100
150
天
B
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
消费的食物/重量 (g/g)
0
5
10
15
20
25
周
C
0.25
0.2
0.15
0.1
0.05
0
消费的水/重量 (g/g)
0
5
10
15
20
25
周
D
8
6
4
2
0
[葡萄糖] (mM)
0
5
10
15
20
周


器官重量
25
20
15
10
5
0
重量 (g)
□未处理的
■处理的
脑
肝脏
胰腺
脾脏
心脏
脂肪
肌肉
组织


对照
NAG-AE
A
Tau-5
B
pSer396
C
pThr231
D
pSer422
对照
NAG-AE
对照
NAG-AE
对照
NAG-AE
E
F
G

大鼠心脏组织中O-GlcNAc水平