



Molecular Weight: 315.322
Accurate Mass: 315.131804
Percentage Composition: C 53.33%; H 6.71%; N 4.44%; O 35.52%
Physical Description: Cryst. (2-propanol/diisopropyl ether)
Melting Point: Mp 120°
Optical Rotation: $[\alpha]_D^{16} +7$ (c, 1 in CHCl₃)

>>Variant: (2*R*,3*S*,4*R*,5*S*)-form

Synonym(s): 1,5,6-Trideoxy-1,5-imino-D-galactitol. 1-Deoxy-D-fuconojirimycin. 1,5-Dideoxy-1,5-imino-D-fucitol

CAS Registry Number: 135395-47-0

Molecular Formula: C₆H₁₃NO₃

Molecular Weight: 147.174

Accurate Mass: 147.089544

Percentage Composition: C 48.97%; H 8.90%; N 9.52%; O 32.61%

Physical Description: Resin

Optical Rotation: $[\alpha]_D^{20} +49$ (c, 1 in H₂O)

>>Variant: (2*R*,3*S*,4*S*,5*S*)-form

Synonym(s): 1,5,6-Trideoxy-1,5-imino-D-gulitol. 1,6-Dideoxy-D-gulonojirimycin

CAS Registry Number: 135395-58-3

Molecular Formula: C₆H₁₃NO₃

Molecular Weight: 147.174

Accurate Mass: 147.089544

Percentage Composition: C 48.97%; H 8.90%; N 9.52%; O 32.61%

Biological Use/Importance: Strong inhibitor of α-L-rhamnosidase

Physical Description: Amorph. solid

Optical Rotation: $[\alpha]_D^{24} +6.3$ (c, 0.96 in H₂O). $[\alpha]_D -3$ (c, 1 in H₂O)

>>Variant: (2*S*,3*R*,4*R*,5*S*)-form

Synonym(s): 1,5,6-Trideoxy-1,5-imino-L-itol. 1,6-Dideoxy-L-idonojirimycin

CAS Registry Number: 134735-66-3

Molecular Formula: C₆H₁₃NO₃

Molecular Weight: 147.174

Accurate Mass: 147.089544

Percentage Composition: C 48.97%; H 8.90%; N 9.52%; O 32.61%

>>Derivative: 3,4,5-Tri-Ac

Molecular Formula: C₁₂H₁₉NO₆

Molecular Weight: 273.285

Accurate Mass: 273.121239

Percentage Composition: C 52.74%; H 7.01%; N 5.13%; O 35.13%

Optical Rotation: $[\alpha]_D +10$ (c, 0.91 in CHCl₃)

>>Variant: (2*S*,3*R*,4*S*,5*R*)-form

Synonym(s): 1,5,6-Trideoxy-1,5-imino-L-galactitol. 1-Deoxy-L-fuconojirimycin. 1,5-Dideoxy-1,5-imino-L-fucitol

CAS Registry Number: 99212-30-3

Molecular Formula: C₆H₁₃NO₃

Molecular Weight: 147.174

Accurate Mass: 147.089544

Percentage Composition: C 48.97%; H 8.90%; N 9.52%; O 32.61%

Biological Use/Importance: Strong inhibitor of α-L-fucosidase

Physical Description: Oil

Optical Rotation: $[\alpha]_D^{20} -48.8$ (c, 0.64 in H₂O)

>>Variant: (2*S*,3*S*,4*R*,5*R*)-form

Synonym(s): 1,5,6-Trideoxy-1,5-imino-L-allitol. 1,6-Dideoxy-L-allonojirimycin

CAS Registry Number: 150085-57-7

Molecular Formula: C₆H₁₃NO₃

Molecular Weight: 147.174

Accurate Mass: 147.089544

Percentage Composition: C 48.97%; H 8.90%; N 9.52%; O 32.61%

Physical Description: Hygroscopic solid