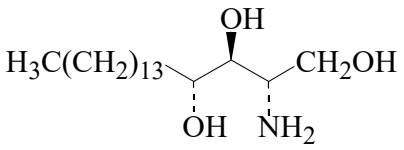
>>**Entry Name: 2-Amino-1,3,4-octadecanetriol,** 8CI
Synonym(s): C_{18}-Phytosphingosine. 4-Hydroxysphinganine



(2*S*,3*S*,4*R*)-*form*

Molecular Formula: $C_{18}H_{39}NO_3$
Molecular Weight: 317.511
Accurate Mass: 317.292994
Percentage Composition: C 68.09%; H 12.38%; N 4.41%; O 15.12%

>>**Variant:** (2*S*,3*S*,4*R*)-form
Synonym(s): D-*ribo*-form

CAS Registry Number: 554-62-1

Molecular Formula: $C_{18}H_{39}NO_3$
Molecular Weight: 317.511
Accurate Mass: 317.292994
Percentage Composition: C 68.09%; H 12.38%; N 4.41%; O 15.12%
Biological Source: Present in cerebrosides and gangliosides
Melting Point: Mp 103° (95-97°)
Optical Rotation: $[\alpha]_D^{20}$+10.3 (Py) (+8.5)
Sigma: P7010

>>**Derivative:** 1-*O*-β-D-Glucopyranoside

CAS Registry Number: 126374-02-5

Molecular Formula: $C_{24}H_{49}NO_8$
Molecular Weight: 479.653
Accurate Mass: 479.345819
Percentage Composition: C 60.10%; H 10.30%; N 2.92%; O 26.68%
Biological Source: Isol. from human thyroid

>>**Derivative:** *N,O,O,O*-Tetra-Ac

Molecular Formula: $C_{26}H_{47}NO_7$
Molecular Weight: 485.66
Accurate Mass: 485.335254
Percentage Composition: C 64.30%; H 9.75%; N 2.88%; O 23.06%
Biological Source: Isol. from yeast *Hansenula ciferrii*
Physical Description: Cryst. (petrol)
Melting Point: Mp 49-50°
Optical Rotation: $[\alpha]_D^{25}$+5 (c, 4.8 in DMF)

>>**Derivative:** *N*-Benzoyl

Molecular Formula: $C_{25}H_{43}NO_4$
Molecular Weight: 421.619
Percentage Composition: C 71.22%; H 10.28%; N 3.32%; O 15.18%
Physical Description: Cryst. (EtOAc)
Melting Point: Mp 137.8-138.8°
Optical Rotation: $[\alpha]_D$ +5 (c, 5.2 in Py)

>>**Derivative:** *N*-Benzoyl, tri-*O*-Ac

Molecular Formula: $C_{31}H_{49}NO_7$
Molecular Weight: 547.731
Percentage Composition: C 67.98%; H 9.02%; N 2.56%; O 20.45%
Physical Description: Cryst. (petrol)
Melting Point: Mp 78-80°
Optical Rotation: $[\alpha]_D$ +22 (c, 0.5 in $CHCl_3$)