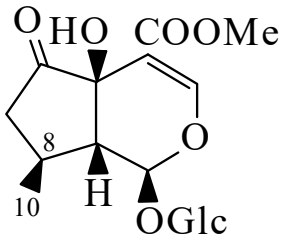
>>**Entry Name: Hastatoside**



CAS Registry Number: 50816-24-5

Molecular Formula: $C_{17}H_{24}O_{11}$
Molecular Weight: 404.37
Accurate Mass: 404.131865
Percentage Composition: C 50.50%; H 5.98%; O 43.52%
Biological Source: Constit. of *Verbena officinalis* and *Penstemon nitidus*
Optical Rotation: $[\alpha]_D^{20}$ –320 (H_2O). $[\alpha]_D$ –9.4 (c, 0.77 in MeOH)
Other Data: Samples not compared. Huge difference in reported opt. rotns.

>>**Derivative:** Tetra-Ac

Molecular Formula: $C_{25}H_{32}O_{15}$
Molecular Weight: 572.519
Accurate Mass: 572.174125
Percentage Composition: C 52.45%; H 5.63%; O 41.92%
Physical Description: Cryst.
Melting Point: Mp 180-182°
Optical Rotation: $[\alpha]_D^{23}$ –245 (c, 0.4 in $CHCl_3$)

>>**Derivative:** 10-Hydroxy
Synonym(s): 10-Hydroxyhastatoside. 10-Hydroxyepihastatoside (obsol.)

Molecular Formula: $C_{17}H_{24}O_{12}$
Molecular Weight: 420.369
Accurate Mass: 420.12678
Percentage Composition: C 48.57%; H 5.75%; O 45.67%
Biological Source: Constit. of *Penstemon secundiflorus*
Physical Description: Amorph. powder (as penta-Ac)
Melting Point: Mp 74-76° (penta-Ac)
Optical Rotation: $[\alpha]_D^{25}$ –126 (c, 0.78 in $CHCl_3$) (penta-Ac)
Other Data: Stereochem. at C-8 revised in 1998

>>**Derivative:** 7,8-Didehydro, 6β-alcohol
Synonym(s): Dehydropenstemoside. Dehydropentstemoside (incorr.). Lamiophlomiside

CAS Registry Number: 139681-98-4

Molecular Formula: $C_{17}H_{24}O_{11}$
Molecular Weight: 404.37
Accurate Mass: 404.131865
Percentage Composition: C 50.50%; H 5.98%; O 43.52%
Biological Source: Constit. of *Lamiophlomis rotata* (*Phlomis rotata*)
Physical Description: Cryst. (MeOH) (as penta-Ac)
Melting Point: Mp 147-149° (Penta-Ac)
Optical Rotation: $[\alpha]_D^{20}$ –78.1 (c, 0.48 in MeOH) (penta-Ac)

>>**Derivative:** 8-Epimer
Synonym(s): 8-Epihastatoside

Molecular Formula: $C_{17}H_{24}O_{11}$
Molecular Weight: 404.37
Accurate Mass: 404.131865
Percentage Composition: C 50.50%; H 5.98%; O 43.52%
Biological Source: Constit. of *Penstemon secundiflorus*
Physical Description: Gum
Optical Rotation: [α]