



Molecular Formula: $C_{22}H_{23}O_{12}^{(+)}$
Molecular Weight: 479.416
Accurate Mass: 479.118955
Percentage Composition: C 55.12%; H 4.84%; O 40.05%
Biological Source: Pigment from whortleberry, blackberry, etc.
Physical Description: Dark bronze-brown flat prisms + 4H₂O (MeOH/HCl) (as chloride)

>>Derivative: 3-*O*-β-D-Glucopyranoside
Synonym(s): Petunidin 3-glucoside

CAS Registry Number: 6988-81-4

Molecular Formula: $C_{22}H_{23}O_{12}^{(+)}$
Molecular Weight: 479.416
Accurate Mass: 479.118955
Percentage Composition: C 55.12%; H 4.84%; O 40.05%
Source/Synthesis: Present in red wine
Biological Source: Isol. from numerous plant spp.
Physical Description: Dark red cryst. with green metallic lustre (as chloride)

>>Derivative: 3-*O*-β-D-Glucopyranoside, 5-*O*-(6-*O*-acetyl-β-D-glucopyranoside)

CAS Registry Number: 202661-56-1

Molecular Formula: $C_{30}H_{35}O_{18}^{(+)}$
Molecular Weight: 683.596
Accurate Mass: 683.182345
Percentage Composition: C 52.71%; H 5.16%; O 42.13%
Biological Source: Constit. of the flowers of *Pelargonium* spp.

>>Derivative: 3-*O*-[4-Hydroxycinnamoyl-(→?)-β-D-glucopyranoside]

CAS Registry Number: 71991-89-4

Molecular Formula: $C_{31}H_{29}O_{14}^{(+)}$
Molecular Weight: 625.562
Accurate Mass: 625.155735
Percentage Composition: C 59.52%; H 4.67%; O 35.81%
Biological Source: Isol. from grapes

>>Derivative: 3-*O*-[4-Hydroxycinnamoyl-(→6)-β-D-glucopyranoside], 5-*O*-β-D-glucopyranoside

CAS Registry Number: 51939-66-3

Molecular Formula: $C_{37}H_{39}O_{19}^{(+)}$
Molecular Weight: 787.704
Accurate Mass: 787.20856
Percentage Composition: C 56.42%; H 4.99%; O 38.59%
Biological Source: Isol. from grapes

>>Derivative: 3-*O*-[4-Hydroxy-*E*-cinnamoyl-(→6)-β-D-glucopyranoside], 5-*O*-(6-*O*-malonyl-β-D-glucopyranoside)

CAS Registry Number: 163857-14-5

Molecular Formula: $C_{40}H_{41}O_{22}^{(+)}$
Molecular Weight: 873.751
Accurate Mass: 873.208955
Percentage Composition: C 54.99%; H 4.73%; O 40.28%
Biological Source: Constit. of the flowers of *Hyacinthus orientalis*

>>Derivative: 3,5-Di-*O*-β-D-glucopyranoside
Synonym(s): Petunin. Muscadinin

CAS Registry Number: 25846-73-5

Molecular Formula: $C_{28}H_{33}O_{17}^{(+)}$