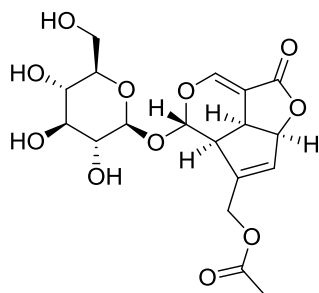


Asperuloside

Code No.: **BIA-A1774**

Pack sizes: **1 mg, 5 mg**



Synonyms : Rubichloric acid, Asperulin

Specifications

CAS #	: 14259-45-1
Molecular Formula	: C ₁₈ H ₂₂ O ₁₁
Molecular Weight	: 414.4
Source	: <i>Coprosma quadrifida</i>
Appearance	: White solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO.

Application Notes

Asperuloside is an iridoid monoterpenoid glycoside derived from the Rubiaceae family of flowering plants first reported in 1893. More recently, asperuloside was reported to have been efficiently isolated from *Coprosma quadrifida* via rapid pressurised hot water extraction by Smith and collaborators at University of Tasmania, Australia. Asperuloside possesses anti-inflammatory, anti-insectan and phosphatidylinositol-3-kinase (PI3K) inhibitory properties. Asperuloside has been shown to exert its anti-inflammatory effects via suppression of the NF-κB and MAPK signaling pathways.

References

1. The preparation and properties of aucubin, asperuloside and some related glycosides. Trim A.R. & Hill R., *Biochem. J.* 1952, 50, 310.
2. Practical isolation of asperuloside from *Coprosma quadrifida* via rapid pressurised hot water extraction. Deans B.J. et al., *Aust. J. Chem.* 2016, 69, 1219.
3. Response of generalist and specialist insects to qualitative allelochemical variation. Deane-Bowers M. & Puttick G.M., *J. Chem. Ecol.* 1988, 14, 319.
4. A multiwell assay for inhibitors of phosphatidylinositol-3-kinase and the identification of natural product inhibitors. Frew T. et al., *Anticancer Res.* 1994, 14, 2425.
5. Asperuloside and asperulosidic acid exert an anti-inflammatory effect via suppression of the NF-κB and MAPK signaling pathways in LPS-Induced RAW 264.7 macrophages. He J. et al., *Int. J. Mol. Sci.* 2018, 19, 2027.