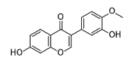


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## **Data Sheet**

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	Calycosin
Cat. No.	:	PC-24316
CAS No.	:	20575-57-9
Molecular Formula	:	$C_{16}H_{12}O_5$
Molecular Weight	:	284.27
Target	:	Other Targets
Solubility	:	10 mM in DMSO



## **Biological Activity**

Calycosin is a flavonoid compound derived from the root of Astragalus, alleviates ischemic stroke by inhibiting PANoptosis. Calycosin has significant effects in various biological activities, including anti-inflammatory, antioxidation, antitumor, improving cardiovascular health, regulating metabolism, and enhancing immune function, especially in the nervous system. Calycosin could improve the cell growth of HT22, leading to enhanced cell viability, reduced lactate dehydrogenase leakage, and decreased cell apoptosis after OGD/R.

Calycosin also regulates the expression of PANoptosis-related genes such as NLRP3, GSDMD, MLKL, and RIPK1 and increases the Bcl-2/Bax ratio, effectively reducing cellular damage and providing protection.

PANoptosis is a newly identified form of cell death that encompasses pyroptosis, apoptosis, and necroptosis.

## References

Huiyan An, et al. ACS Chem Neurosci. 2025 Mar 29. doi: 10.1021/acschemneuro.5c00072.

Zhou Y, et al. Tumour Biol. 2015 Feb 12.

Caution: Product has not been fully validated for medical applications. Lab Use Only! E-mail: tech@probechem.com