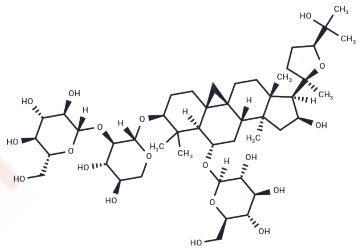
Data Sheet (Cat.No.T13559)

TargetMol

Astragaloside VI

Chemical Properties



CAS No. : 84687-45-6

Formula: C47H78O19

Molecular Weight: 947.122

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Astragaloside VI could improve wound healing by activating the EGFR/ERK signaling pathway.
Targets(IC50)	EGFR
In vitro	Pretreatment with Astragaloside VI (1 μM) enhances EGFR activation in HaCaT cells and significantly promotes cell proliferation in both HaCaT and HDF cells. As a principal intestinal metabolite of astragalosides, Astragaloside VI is the most potent in stimulating EGFR activation. Furthermore, it is comparable to the positive control, EGF, which is known to increase cell proliferation by 1.5 times in HaCaT cells. Additionally, Astragaloside VI facilitates neural stem cell proliferation and improves neurological function recovery following transient cerebral ischemic injury through the activation of EGFR/MAPK signaling pathways [1] [2].
In vivo	In the simple non-infected wound model, wound healing in mice is accelerated by Astragaloside VI, wherein the time required for wound closure is shortened by approximately 2-4 days, compared to that in the control group. Topical treatment with Astragaloside VI reduces the volume of pus produced, compared to the control group. Astragaloside VI treated wounds show an accelerated rate of healing, compared to the control and vaseline groups. By day 22, the Astragaloside VI -treated wounds fully close, whereas the blank and vaseline-treated wounds do not fully close until day 26. Astragaloside VI increases blood vessel formation in both the non-infected and infected wound models [1]. Astragaloside VI could effectively activate EGFR/MAPK signaling cascades, promote NSCs proliferation and neurogenesis in transient cerebral ischemic brains, and improve the repair of neurological functions in post-ischemic stroke rats [2].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.0558 mL	5.2792 mL	10.5583 mL
5 mM	0.2112 mL	1.0558 mL	2.1117 mL
10 mM	0.1056 mL	0.5279 mL	1.0558 mL
50 mM	0.0211 mL	0.1056 mL	0.2112 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Lee SY, et al. Astragaloside VI and cycloastragenol-6-O-beta-D-glucoside promote wound healing in vitro and in vivo. Phytomedicine. 2018 Jan 1;38:183-191.
Chen X, et al. Astragaloside VI Promotes Neural Stem Cell Proliferation and Enhances Neurological Function Recovery in Transient Cerebral Ischemic Injury via Activating EGFR/MAPK Signaling Cascades. Mol Neurobiol. 2018 Aug 7.