Complanatoside A

Cat. No.: HY-N0624

CAS No.: 146501-37-3

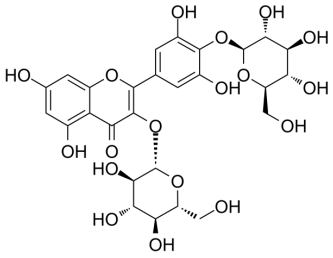
Molecular Formula: $C_{27}H_{30}O_{18}$

Molecular Weight: 642.52

Target: Others

Pathway: Others

Storage: Please store the product under the recommended conditions in the Certificate of Analysis.



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 35.7 mg/mL (55.56 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	1.5564 mL	7.7819 mL	15.5637 mL
	5 mM	0.3113 mL	1.5564 mL	3.1127 mL
	10 mM	0.1556 mL	0.7782 mL	1.5564 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Complanatoside A is a flavonol glycoside isolated from Astragalus complanatus, and currently it is used as a quality control index for A. complanatus in the 2010 edition of the Chinese Pharmacopoeia.

In Vitro

A simple and sensitive LC-MS/MS method is developed for the determination of complanatoside A in rat plasma over the range of 2.3–575 ng/mL. Complanatoside A is extracted from plasma by a protein precipitation procedure, separated by LC and detected by MS/MS in positive electrospray ionization mode. The lower limit of quantification is established at 2.3 ng/mL. Intra- and inter-day precisions (LLOQ, low-QC, med-QC and high-QC) are less than 7.9%, and accuracies are between 94.0 and 105.1%. Matrix effect is acceptable (97.9–103.0%) and extraction recovery is reproducible (88.5–94.4%). Complanatoside A is stable in the investigated conditions. The method is applied to the pharmacokinetics of complanatoside A in rats[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

PROTOCOL

Animal Administration [1]	Rats: The rats are fasted for 12 h before the experiment. Complanatoside A is formulated in water and a single dose of 30 mg/kg is administered by oral gavage. Blood samples are obtained from the vena orbitalis just prior to dose and at 0.083, 0.167, 0.25, 0.5, 0.75, 1, 2, 3, 5, 7, 10 and 14 h after administration. After centrifugation at 6000g for 10 min, the upper plasma is collected and stored at–20°C before analysis. The data are calculated by Drug&Statistics software[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Li N, et al. Quantification of complanatoside A in rat plasma using LC-MS/MS and its application to a pharmacokinetic study. Biomed Chromatogr. 2016 Jun;30(6):888-93.

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