

Product Data Sheet

Product Name: Complanatoside A
Cat. No.: GN10653

Chemical Properties

Cas. No. 146501-37-3

Chemical Name 5-hydroxy-7-methoxy-3-[(2S,3R,4S,5S,6R)-3,4,5-trihydroxy-6-(hydroxymethyl)oxan-2-yl]oxy-2-[4-[(2S,3R,4S,5S,6R)-3,4,5-trihydroxy-6-(hydroxymethyl)oxan-2-yl]oxyphenyl]chromen-4-one

SMILES COC1=CC(=C2C(=C1)OC(=C(C2=O)OC3C(C(C(C(O3)CO)O)O)O)C4=CC=C(C=C4)OC5C(C(C(C(O5)CO)O)O)O)O

Formula C₂₈H₃₂O₁₈

M.Wt

656.16

Solubility ≥ 65.6mg/mL in DMSO

Storage

General For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a tips while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

Protocol

Animal experiment:

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].

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.

Background

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.

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–

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94.4%). Complanatoside A is stable in the investigated conditions. The method is applied to the pharmacokinetics of complanatoside A in rats[1].

References:

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