

Certificate of Analysis

www.tocris.com

Product Name: Castanospermine

Catalog No.: 0759

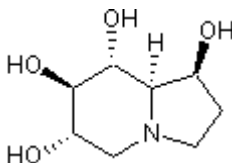
Batch No.: 3

CAS Number: 79831-76-8

IUPAC Name: [1S-(1 α ,6 β ,7 α ,8 β ,8 $\alpha\beta$)]-Octahydro-1,6,7,8-indolizinetetrol

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₈H₁₅NO₄
Batch Molecular Weight: 189.21
Physical Appearance: White solid
Solubility: DMSO to 50 mM
 water to 100 mM
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Optical Rotation: [α]_D = +85.2 (Concentration = 0.93, Solvent = Water)
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	50.78	7.99	7.4
Found	50.79	8	7.37

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Product Name: Castanospermine

Catalog No.: 0759

Batch No.: 3

CAS Number: 79831-76-8

IUPAC Name: [1S-(1 α ,6 β ,7 α ,8 β ,8 $\alpha\beta$)]-Octahydro-1,6,7,8-indolizinetetrol

Description:

Potent inhibitor of α - and β -glucosidases, especially glucosidase I (required for glycoprotein processing by transfer of mannose and glucose from asparagine-linked lipids). Inhibits HIV syncytium formation and replication.

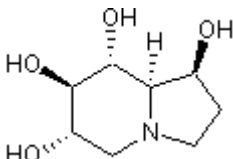
Physical and Chemical Properties:

Batch Molecular Formula: C₈H₁₅NO₄

Batch Molecular Weight: 189.21

Physical Appearance: White solid

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

DMSO to 50 mM
water to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Saul et al (1984) Studies on the mechanism of castanospermine inhibition of α - and β -glucosidases. Arch.Biochem.Biophys. **230** 668. PMID: 6424575.

Welker et al (1987) Inhibition of human immunodeficiency virus syncytium formation and virus replication by castanospermine. Proc.Natl.Acad.Sci.U.S.A. **84** 8120. PMID: 2825177.

Gruters et al (1987) Interference with HIV-induced syncytium formation and viral infectivity by inhibitors of trimming glucosidase. Nature **330** 74. PMID: 2959866.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956