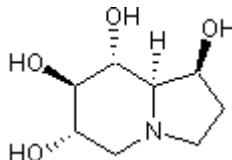


**Certificate of Analysis**[www.tocris.com](http://www.tocris.com)**Product Name:** Castanospermine**Catalog No.:** 0759**Batch No.:** 3**CAS Number:** 79831-76-8**IUPAC Name:** [1S-(1 $\alpha$ ,6 $\beta$ ,7 $\alpha$ ,8 $\beta$ ,8a $\beta$ )]-Octahydro-1,6,7,8-indolizinetetrol**1. PHYSICAL AND CHEMICAL PROPERTIES****Batch Molecular Formula:** C<sub>8</sub>H<sub>15</sub>NO<sub>4</sub>**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****<sup>1</sup>H NMR:** Consistent with structure**Mass Spectrum:** Consistent with structure**Optical Rotation:** [α]<sub>D</sub> = +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

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## Product Information

[www.tocris.com](http://www.tocris.com)**Product Name:** Castanospermine**Catalog No.:** 0759**Batch No.:** 3

CAS Number: 79831-76-8

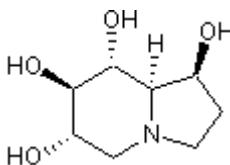
IUPAC Name: [1S-(1 $\alpha$ ,6 $\beta$ ,7 $\alpha$ ,8 $\beta$ ,8a $\beta$ )]-Octahydro-1,6,7,8-indolizinetetrol**Description:**

Potent inhibitor of  $\alpha$ - and  $\beta$ -glucosidases, especially glucosidase I (required for glucoprotein processing by transfer of mannose and glucose from asparagine-linked lipids). Inhibits HIV syncytium formation and replication.

**Physical and Chemical Properties:**Batch Molecular Formula: C<sub>8</sub>H<sub>15</sub>NO<sub>4</sub>

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  $\alpha$ - and  $\beta$ -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.

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