



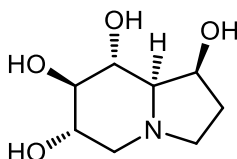
Catalog # 10-1132

Castanospermine

CAS# 79831-76-8

(1S,6S,7R,8R,8aR)-1,6,7,8-Tetrahydroxyindolizidine

Lot # X101019



Natural product, derived from *Castanospermum austral*. Potent inhibitor of α - and β -glucosidases.¹ Exhibits antiviral properties.² Inhibits HIV infectivity³. Inhibits thyroglobulin secretion.⁴ Displays antitumor activity and anti-angiogenic activity.⁵ Prevents hyperglycemic response to oral glucose load (<1 mg/Kg) in rats.⁶

- 1) Saul *et al.* (1984), *Studies on the mechanism of castanospermine inhibition of alpha- and beta-glucosidases*; Arch. Biochem. Biophys, **230** 668
- 2) Repp *et al.* (1985), *The effects of processing inhibitors on N-linked oligosaccharides on the intracellular migration of glycoprotein E2 of mouse hepatitis virus and the maturation of coronavirus particles*; J. Biol. Chem., **260** 15873
- 3) Gruters *et al.* (1987), *Interference with HIV-induced syncytium formation and viral infectivity by inhibitors of trimming glucosidase*; Nature, **330** 74
- 4) Franc *et al.* (1990), *Effects of deoxymannojirimycin and castanospermine on the polarized secretion of thyroglobulin*; Endocrinology, **126** 1464
- 5) Pili *et al.* (1995), *The alpha-glucosidase I inhibitor castanospermine alters endothelial cell glycosylation, prevents angiogenesis, and inhibits tumor growth*; Mol. Cancer Res., **55** 2920
- 6) Rhinehart *et al.* (1987), *Castanospermine blocks the hyperglycemic response to carbohydrates in vivo: a result of intestinal disaccharidase inhibition*; Life Sci., **41** 2325

PHYSICAL DATA

Molecular Weight:	189.21
Molecular Formula:	C ₈ H ₁₅ NO ₄
Purity:	99% by TLC
	NMR: Conforms
Solubility:	Water (up to 25 mg/ml)
Physical Description:	White or off-white solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Protect from exposure to moisture. Solutions in water may be stored at -20°C for up to 3 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

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