

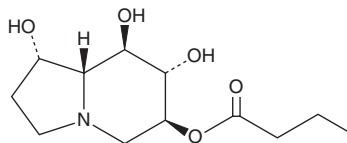
PRODUCT INFORMATION



Celgosivir

Item No. 36526

CAS Registry No.: 121104-96-9
Formal Name: butanoic acid, (1S,6S,7S,8R,8aR)-octahydro-1,7,8-trihydroxy-6-indolizinyloxy ester
Synonyms: 6-O-butanoyl Castanospermine, MDL 28574
MF: C₁₂H₂₁NO₅
FW: 259.3
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Celgosivir is supplied as a solid. A stock solution may be made by dissolving the celgosivir in the solvent of choice, which should be purged with an inert gas. Celgosivir is slightly soluble in chloroform and DMSO.

Description

Celgosivir is an α -glucosidase inhibitor (IC_{50} = 0.7 μ g/ml) and a prodrug form of the α - and β -glucosidase inhibitor castanospermine (Item No. 11313).^{1,2} It reduces bovine viral diarrhea virus (BVDV) levels in a plaque formation assay (IC_{50} = 16 mM) and increases the survival of bovine kidney (MDBK) cells infected with BVDV (IC_{50} = 47 μ M).³ Intraperitoneal administration of celgosivir (50 mg/kg twice daily) reduces viremia and increases the survival of mice infected with a lethal dose of dengue virus.⁴

References

1. Sunkara, P.S., Kang, M.S., Bowlin, T.L., *et al.* Inhibition of glycoprotein processing and HIV replication by castanospermine analogues. *Ann. NY Acad. Sci.* **616**, 90-96 (1990).
2. Winchester, B.G., di Bello, I.C., Richardson, A.C., *et al.* The structural basis of the inhibition of human glycosidases by castanospermine analogues. *Biochem. J.* **269**(1), 227-231 (1990).
3. Whitby, K., Taylor, D., Patel, D., *et al.* Action of celgosivir (6 O-butanoyl castanospermine) against the pestivirus BVDV: Implications for the treatment of hepatitis C. *Antivir. Chem. Chemother.* **15**(3), 141-151 (2004).
4. Watanabe, S., Rathore, A.P.S., Sung, C., *et al.* Dose- and schedule-dependent protective efficacy of celgosivir in a lethal mouse model for dengue virus infection informs dosing regimen for a proof of concept clinical trial. *Antiviral Res.* **96**(1), 32-35 (2012).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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