Datasheet

Product overview

Name  Cyclosporin A
Cat No  HB0220
Short description  Potent calcineurin inhibitor. Inhibits MPTP opening.
Biological description  Potent calcineurin inhibitor (IC$_{50}$ = 5 nM). Inhibits mitochondrial permeability transition pore (MPTP) opening and also P-glycoprotein inhibitor and increases AKT activation. Displays immunosuppressive, tumor promoting and pro-angiogenic properties.
Alternative names  Cyclosporine; Antibiotic S 7481F1; Ciclosporin A; CSA; cyclosporine A
Biological action  Inhibitor
Purity  >99%

Properties

Molecular Weight  1202.63
Molecular Formula  C$_{62}$H$_{111}$N$_{11}$O$_{12}$
CAS Number  59865-13-3
PubChem identifier  2909
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Storing and Using Your Product

Storage instructions  -20°C (desiccate)
Solubility overview  Soluble in DMSO (100mM) or ethanol (50mM)
Important  This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

References for Cyclosporin A

Cyclosporin A Promotes Tumor Angiogenesis in a Calcineurin-Independent Manner by Increasing Mitochondrial Reactive Oxygen Species.
Zhou AY et al (2014) Mol Cancer Res :
PubMedID: 25009293

The P-glycoprotein inhibitor cyclosporin A differentially influences behavioural and neurochemical responses to the antidepressant escitalopram.
PubMedID: 24280122
Calcineurin phosphatase activity in T lymphocytes is inhibited by FK 506 and cyclosporin A.
PubMedID: 1373887

Immunosuppressive cyclosporin A activates AKT in keratinocytes through PTEN suppression: implications in skin carcinogenesis.
PubMedID: 20154081