Cyclosporin A

**Product Analysis Sheet**

**Catalog Number:** PHZ1054  
**Lot Number:** See product label  
**Quantity:** 100 mg  
**Appearance:** White solid  
**Molecular Formula:** C_{62}H_{111}N_{11}O_{12}  
**Molecular Weight:** 1202.6  
**Purity:** >98%

**Summary:** Cyclosporin A (CsA) is an immunosuppressant that has revolutionized organ transplantation through its use in the prevention of graft rejection. By binding to cyclophilin, CsA produces several effects, including suppression of raline rotamase activity and inhibition of calcineurin, a type 2B phosphatase. CsA also has utility in studies of apoptosis, inhibiting staurosporine-induced apoptosis in cultured neural cells and rotenone-induced apoptosis in PC12 cells. The mechanism by which this compound inhibits apoptosis is through the inhibition of mitochondrial permeability transition pore opening, an inhibition which can be suppressed or made transient by increased Ca^{2+} concentrations.

**Solubility:** Soluble in ethanol at a concentration of 25 mg/mL; soluble in DMSO at a concentration of 25 mg/mL.

**Sterility:** This product is not sterile.

**Storage:** Store, as supplied, at –20°C. Upon solubilization, apportion into working aliquots and store at –20°C. Avoid repeated freeze/thaw cycles. Solutions are stable at –20°C for up to three months.

**Expiration Date:** Expires one year from date of receipt when stored as instructed.

**Related Products:**
- GSK-3β [pS^{9}] antibody, Cat. # 44-600G
- GSK-3β [pY^{216}] antibody, Cat. # 44-604G
- NFAT1 [pS^{54}] (mouse) antibody, Cat. # 44-944

**References:**

This product is for research use only. Not for use in diagnostic procedures.

[www.invitrogen.com](http://www.invitrogen.com)

Manufactured under ISO 13485 Quality Standard

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Caution: Avoid contact with eyes, skin, and mucous membranes. Wear protective clothing when handling this product. Not for human use.

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