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Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

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Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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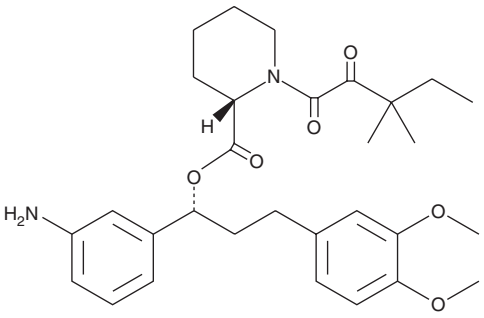
PRODUCT INFORMATION

SLF

Item No. 10007974

CAS Registry No.: 195513-96-3
Formal Name: 1-(3,3-dimethyl-1,2-dioxopentyl)-(2S)-2-piperidinecarboxylic acid, (1R)-1-(3-aminophenyl)-3-(3,4-dimethoxyphenyl)propyl ester
Synonym: Synthetic Ligand of FKBP
MF: $C_{30}H_{40}N_2O_6$
FW: 524.7
Purity: ≥98%
UV/Vis.: λ_{max}: 205, 232, 281 nm
Supplied as: A solution in ethanol
Storage: -20°C
Stability: As supplied, 1 year from the QC date provided on the Certificate of Analysis, when stored properly



Laboratory Procedures

SLF is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of SLF in these solvents is approximately 30 mg/ml.

SLF is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of SLF should be diluted with the aqueous buffer of choice. SLF has a solubility of approximately 0.2 mg/ml in a 1:3 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

FK-506 is a potent immunosuppressant that forms a high affinity complex (K_i = 0.2 nM) with FK-506 binding protein 12 (FKBP12). This complex inhibits the activity of the calcium/calmodulin-dependent protein phosphatase, calcineurin, leading to disruption of T-cell activation.[1] SLF is a cell-permeable analog of FK-506 that binds tightly to FKBP but lacks the ability to inhibit calcineurin.[2] By itself, SLF does not exhibit a significant cellular response. However, homodimers of SLF or heterodimers with another protein ligand, provide a method to promote the dimerization of ligand-specific fusion proteins to induce signaling events within a cellular environment.[2,3] For example, SLF monomers connected with a 10-atom linker activates Fas signaling *via* Fas-FKBP fusion proteins with an EC_{50} of 6 nM.[3]

References

1. Dumont, F.J. FK506, An immunosuppressant targeting calcineurin function. *Current Medicinal Chemistry* **7**, 731-748 (2000).
2. Braun, P.D., Barglow, K.T., Lin, Y.-M., *et al.* A bifunctional molecule that displays context-dependent cellular activity. *J. Am. Chem. Soc.* **125**, 7575-7580 (2003).
3. Amara, J.F., Clackson, T., Rivera, V.M., *et al.* A versatile synthetic dimerizer for the regulation of protein-protein interactions. *Proc. Natl. Acad. Sci. USA* **94**, 10618-10623 (1997).

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.

WARRANTY AND LIMITATION OF REMEDY
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