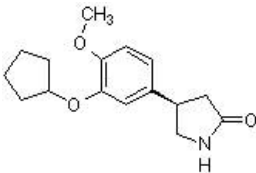


Product datasheet

(R)-(-)-Rolipram, Selective PDE4 inhibitor ab120031

1 References 2 Images

Overview

Product name	(R)-(-)-Rolipram, Selective PDE4 inhibitor
Description	Selective PDE4 inhibitor
Biological description	Selective PDE4 inhibitor (IC ₅₀ = 0.22 μM). More active enantiomer: 2-10-fold more potent than the (S)-(+)-enantiomer (ab120030).
Purity	> 98%
CAS Number	85416-75-7
Chemical structure	

Properties

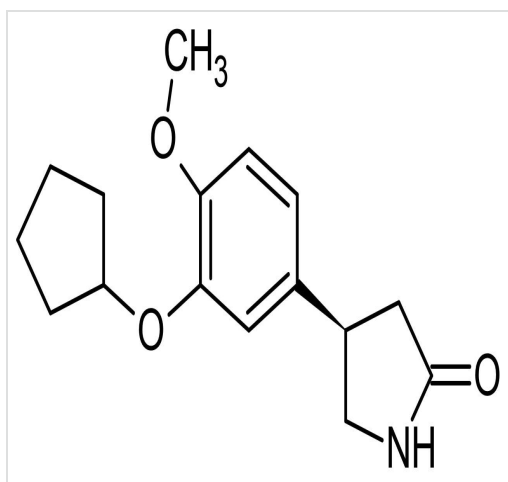
Chemical name	(4R)-4-[3-(Cyclopentyloxy)-4-methoxyphenyl]pyrrolidin-2-one
Molecular weight	275.35
Molecular formula	C ₁₆ H ₂₁ NO ₃
PubChem identifier	448055
Storage instructions	Store at +4°C. Store under desiccating conditions. The product can be stored for up to 12 months.
Solubility overview	Soluble in DMSO to 100 mM
Handling	<p>Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.</p> <p>Need more advice on solubility, usage and handling? Please visit our frequently asked questions (FAQ) page for more details.</p>
SMILES	<chem>COc2ccc(cc2OC1CCCC1)[C@H]3CC(=O)NC3</chem>
Source	Synthetic

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab120031 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

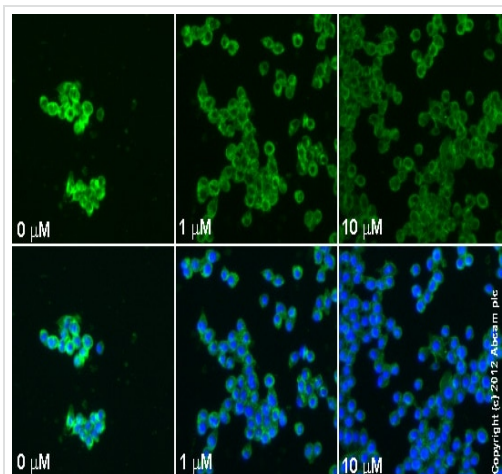
Application	Abreviews	Notes
Functional Studies		Use at an assay dependent concentration.

Images



2D chemical structure image of ab120031, (R)-(-)-Rolipram, Selective PDE4 inhibitor

Chemical Structure - (R)-(-)-Rolipram, Selective PDE4 inhibitor (ab120031)



Functional Studies - (R)-(-)-Rolipram, Selective PDE4 inhibitor (ab120031)

[ab1793](#) staining TNF α in RAW 264.7 cells treated with (R)-(-)-rolipram (ab120031), by ICC/IF. Decrease in TNF α expression correlates with increased concentration of (R)-(-)-rolipram, as described in literature.

The cells were incubated at 37°C for 24h in media containing different concentrations of ab120031 ((R)-(-)-rolipram) in DMSO, fixed with 100% methanol for 5 minutes at -20°C and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with [ab1793](#) (5 μ g/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 goat anti-mouse polyclonal antibody ([ab96879](#)) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES, NOT FOR USE IN HUMANS"

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