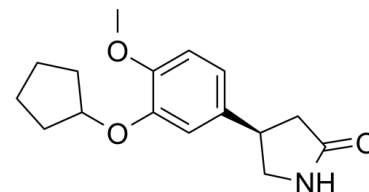


Data Sheet

Product Name:	(R)-(-)-Rolipram
Cat. No.:	CS-3246
CAS No.:	85416-75-7
Molecular Formula:	C ₁₆ H ₂₁ NO ₃
Molecular Weight:	275.34
Target:	Phosphodiesterase (PDE)
Pathway:	Metabolic Enzyme/Protease
Solubility:	DMSO : ≥ 49 mg/mL (177.96 mM)



BIOLOGICAL ACTIVITY:

(R)-(-)-Rolipram is the R-enantiomer of Rolipram. Rolipram is a selective inhibitor of phosphodiesterases **PDE4** with **IC₅₀** of 3 nM, 130 nM and 240 nM for PDE4A, PDE4B, and PDE4D, respectively. **In Vitro:** The increase of cAMP synthesis with the adenylate cyclase activator forskolin or the decrease of cAMP hydrolysis by the phosphodiesterase inhibitors Isobutylmethylxanthine (IBMX) and (R)-(-)-Rolipram (MedChem Express) suppresses caspase-1 cleavage and IL-1 β secretion in a dose-dependent manner^[1].

References:

[1]. Guo C, et al. Bile Acids Control Inflammation and Metabolic Disorder through Inhibition of NLRP3 Inflammasome. Immunity. 2016 Oct 18;45(4):944.

CAIndexNames:

2-Pyrrolidinone, 4-[3-(cyclopentyloxy)-4-methoxyphenyl]-, (4R)-

SMILES:

O=C1NC[C@@H](C2=CC=C(C(OC)C(OC3CCCC3)=C2)C1

Caution: Product has not been fully validated for medical applications. For research use only.

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