

## GEBR-7b

## Chemical Properties

CAS No. :	67387-76-2
Formula:	C13H16O3
Molecular Weight:	220.264
Storage:	Pure form: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.

## Biological Description

Description	GEBR-7b (3-(Cyclopentyloxy)-4-methoxybenzaldehyde) is a phosphodiesterase-4 (PDE4) inhibitor.
Targets(IC50)	PDE

## Solubility Information

Solubility	DMSO: 60.00 mg/mL (272.40 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.5401 mL	22.7004 mL	45.4009 mL
5 mM	0.908 mL	4.5401 mL	9.0802 mL
10 mM	0.454 mL	2.270 mL	4.5401 mL
50 mM	0.0908 mL	0.454 mL	0.908 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Bruno O, Brullo C, Arduino N, Schenone S, Ranise A, Bondavalli F, Ottonello L, Dapino P, Dallegri F. Synthesis and biological evaluation of neutrophilic inflammation inhibitors. *Farmaco*. 2004 Mar;59(3):223-35.

Sierksma AS, van den Hove DL, Pfau F, Philippens M, Bruno O, Fedele E, Ricciarelli R, Steinbusch HW, Vanmierlo T, Prickaerts J. Improvement of spatial memory function in APPswe/PS1dE9 mice after chronic inhibition of phosphodiesterase type 4D. *Neuropharmacology*. 2014 Feb;77:120-30. doi: 10.1016/j.neuropharm.2013.09.015. Epub 2013 Sep 22. PubMed PMID: 24067928.

Liu X, Guo H, Sayed MD, Lu Y, Yang T, Zhou D, Chen Z, Wang H, Wang C, Xu J. cAMP/PKA/CREB/GLT1 signaling involved in the antidepressant-like effects of phosphodiesterase 4D inhibitor (GEBR-7b) in rats. *Neuropsychiatr Dis Treat*. 2016 Jan 21;12:219-27. doi: 10.2147/NDT.S90960. eCollection 2016. PubMed PMID: 26855578; PubMed Central PMCID: PMC4725689.

Bruno O, Fedele E, Prickaerts J, Parker LA, Canepa E, Brullo C, Cavallero A, Gardella E, Balbi A, Domenicotti C, Bollen E, Gijsselaers HJ, Vanmierlo T, Erb K, Limebeer CL, Argellati F, Marinari UM, Pronzato MA, Ricciarelli R. GEBR-7b, a novel PDE4D selective inhibitor that improves memory in rodents at non-emetic doses. *Br J Pharmacol*. 2011 Dec; 164(8):2054-63. doi: 10.1111/j.1476-5381.2011.01524.x. PubMed PMID: 21649644; PubMed Central PMCID: PMC3246667.

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