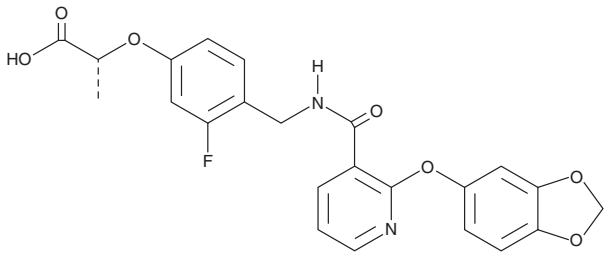
PRODUCT INFORMATION

CP 671,305

Item No. 26743

CAS Registry No.:	445295-04-5
Formal Name:	(2R)-2-[4-[[[[2-(1,3-benzodioxol-5-yloxy)-3-pyridinyl]carbonyl]amino]methyl]-3-fluorophenoxy]-propanoic acid
MF:	$C_{23}H_{19}FN_2O_7$
FW:	454.4
Purity:	≥98%
UV/Vis.:	λ_{max}: 279 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

CP 671,305 is supplied as a crystalline solid. A stock solution may be made by dissolving the CP 671,305 in the solvent of choice, which should be purged with an inert gas. CP 671,305 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of CP 671,305 in these solvents is approximately 3, 25, and 50 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of CP 671,305 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of CP 671,305 in PBS, pH 7.2, is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

CP 671,305 is a potent inhibitor of phosphodiesterase 4D (PDE4D; IC_{50} = 3 nM).[1] It is selective for PDE4D over PDE4A, -B, and -C (IC_{50}s = 310, 287, and 3,858 nM, respectively), as well as over PDE1-3 and 5 (IC_{50}s = >5,000 nM for all). CP 671,305 inhibits release of leukotriene E_4 (LTE_4; Item No. 20410) from eosinophils (IC_{50} = 52 nM) and LTB_4 (Item No. 20110) from neutrophils (IC_{50} = 106 nM). *In vivo*, CP 671,305 inhibits antigen-induced pulmonary eosinophil influx in cynomolgus monkeys in a dose-dependent manner.

Reference

1. Kalgutkar, A.S., Choo, E., Taylor, T.J., *et al.* Disposition of CP-671, 305, a selective phosphodiesterase 4 inhibitor in preclinical species. *Xenobiotica* **34(8)**, 755-770 (2004).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM