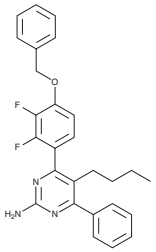
PRODUCT INFORMATION

5-Butyl-4-[2,3-difluoro-4-(phenylmethoxy)phenyl]-6-phenyl-2-pyrimidinamine

Item No. 31338



CAS Registry No.: 2253745-78-5
MF: $C_{27}H_{25}F_2N_3O$
FW: 445.5
Purity: ≥98%
Supplied as: A 1 mg/ml solution in methyl acetate
Storage: -20°C
Stability: ≥1 year

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

Laboratory Procedures

5-Butyl-4-[2,3-difluoro-4-(phenylmethoxy)phenyl]-6-phenyl-2-pyrimidinamine is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol and chloroform purged with an inert gas can be used. The solubility of 5-butyl-4-[2,3-difluoro-4-(phenylmethoxy)phenyl]-6-phenyl-2-pyrimidinamine in these solvents is approximately 10 mg/ml.

Description

5-Butyl-4-[2,3-difluoro-4-(phenylmethoxy)phenyl]-6-phenyl-2-pyrimidinamine is an inhibitor of microsomal prostaglandin E synthase-1 (mPGES-1; IC_{50}s = 66 and 2,730 nM for the human and mouse enzymes, respectively).[1] It is selective for mPGES-1 over COX-1 but does inhibit COX-2 at 20 µM. It also inhibits LPS-induced prostaglandin E_2 (PGE_2; Item No. 14010) production in mouse peritoneal cells (IC_{50} = 12 nM). *In vivo*, 5-butyl-4-[2,3-difluoro-4-(phenylmethoxy)phenyl]-6-phenyl-2-pyrimidinamine (25 mg/kg) reduces carrageenan-induced paw edema in rats.

Reference

1. Kalčic, F., Kolman, V., Ajani, H., *et al.* Polysubstituted pyrimidines as mPGES-1 inhibitors: Discovery of potent inhibitors of PGE_2 production with strong anti-inflammatory effects in carrageenan-induced rat paw edema. *ChemMedChem* **15(15)**, 1398-1407 (2020).

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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