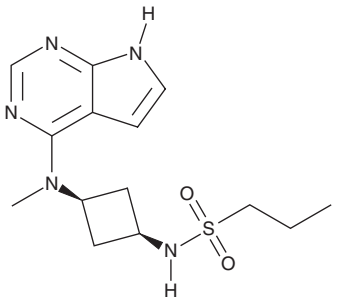
PRODUCT INFORMATION

Abrocitinib

Item No. 34869

CAS Registry No.:	1622902-68-4
Formal Name:	N-[*cis*-3-(methyl-7H-pyrrolo[2,3-d] pyrimidin-4-ylamino)cyclobutyl]-1-propanesulfonamide
Synonym:	PF-04965842
MF:	$C_{14}H_{21}N_5O_2S$
FW:	323.4
Purity:	≥98%
UV/Vis.:	λ_{max}: 288 nm
Supplied as:	A 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

Abrocitinib is supplied as a solid. A stock solution may be made by dissolving the abrocitinib in the solvent of choice, which should be purged with an inert gas. Abrocitinib is soluble in DMSO.

Description

Abrocitinib is a JAK1 inhibitor (IC_{50} = 0.029 µM).[1] It is selective for JAK1 over JAK2, JAK3, and TYK2 (IC_{50}s = 0.803, >10, and 1.253 µM, respectively) and a panel of 40 kinases at 1 µM. Abrocitinib inhibits IFN-α-, IL-21-, or IL-27-induced phosphorylation of STAT3 (IC_{50}s = 0.189, 0.511, and 0.271 µM, respectively) and IFN-γ-induced phosphorylation of STAT1 (IC_{50} = 0.163 µM) in isolated human whole blood. It reduces paw edema in a rat model of adjuvant-induced arthritis when administered at doses of 1, 5, and 15 mg/kg. Formulations containing abrocitinib have been used in the treatment of atopic dermatitis.

Reference

1. Vazquez, M.L., Kaila, N., Strohbach, J.W., *et al.* Identification of *N*-{*cis*-3-[methyl(7*H*-pyrrolo[2,3-*d*] pyrimidin-4-yl)amino]cyclobutyl}propane-1-sulfonamide (PF-04965842): A selective JAK1 clinical candidate for the treatment of autoimmune diseases. *J. Med. Chem.* **61(3)**, 1130-1152 (2018).

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