PRODUCT INFORMATION



LP-935509

Item No. 37283

CAS Registry No.: Formal Name:	1454555-29-3 4-[3-(2-methoxy-3-pyridinyl) pyrazolo[1,5-a]pyrimidin-5-yl]- 1-piperazinecarboxylic acid, 1-methylethyl ester
MF: FW: Purity: UV/Vis.: Supplied as:	$C_{20}H_{24}N_{6}O_{3}$ 396.4 \geq 98% λ_{max} : 268, 308, 321 nm A solid
Storage: Stability:	-20°C ≥4 years
,	s the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

LP-935509 is supplied as a solid. A stock solution may be made by dissolving the LP-935509 in the solvent of choice, which should be purged with an inert gas. LP-935509 is soluble in DMSO.

Description

LP-935509 is an inhibitor of AP2-associated protein kinase 1 (AAK1) and BMP2-inducible kinase (BIKe; IC₅₀s = 3.3 and 14 nM, respectively).¹ It is selective for AAK1 and BIKe over μ - and κ -opioid, as well as α_{2A} - and α_{2C} -adrenergic, receptors (IC₅₀s = >30 μ M for all), α_1 and α_2 subunit-containing GABA_A receptors (IC₅₀s = 12 μ M for both), and cyclin G-associated kinase (GAK; IC₅₀ = 0.32 μ M). LP-935509 (1 μ M) reduces phosphorylation of the synaptic vesicle regulator AP2 complex subunit Mu-1 (AP2M1) in SH-SY5Y neuroblastoma cells.² It reduces the number of formalin-induced flinches in mice when administered at doses of 10, 30, and 60 mg/kg.¹

References

- 1. Kostich, W., Hamman, B.D., Li, Y.-W., et al. Inhibition of AAK1 kinase as a novel therapeutic approach to treat neuropathic pain. J. Pharmacol. Exp. Ther. 358(3), 371-386 (2016).
- Liu, Q., Bautista-Gomez, J., Higgins, D.A., et al. Dysregulation of the AP2M1 phosphorylation cycle by 2. LRRK2 impairs endocytosis and leads to dopaminergic neurodegeneration. Sci. Signal. 14(693), eabg3555 (2021).

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.

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 04/12/2023

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