

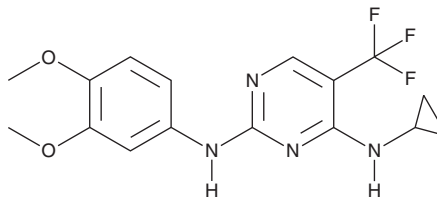
PRODUCT INFORMATION



SBP-7455

Item No. 32988

CAS Registry No.: 1884222-74-5
Formal Name: N⁴-cyclopropyl-N²-(3,4-dimethoxyphenyl)-5-(trifluoromethyl)-2,4-pyrimidinediamine
MF: C₁₆H₁₇F₃N₄O₂
FW: 354.3
Purity: ≥98%
UV/Vis.: λ_{max}: 221, 276 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

SBP-7455 is supplied as a crystalline solid. A stock solution may be made by dissolving the SBP-7455 in the solvent of choice, which should be purged with an inert gas. SBP-7455 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of SBP-7455 in ethanol is approximately 1 mg/ml and approximately 30 mg/ml in DMSO and DMF.

SBP-7455 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SBP-7455 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. SBP-7455 has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

SBP-7455 is a dual inhibitor of unc-51-like autophagy activating kinase 1 (ULK1) and ULK2 (IC₅₀s = 13 and 476 nM, respectively, for the recombinant human enzymes in cell-free assays).¹ It inhibits increases in autophagic flux and induces apoptosis in serum-deprived MDA-MB-468 breast cancer cells when used at a concentration of 10 μM. SBP-7455 (0.19 μM), alone or in combination with olaparib (Item No. 10621), reduces the viability of MDA-MB-468 cells.

Reference

1. Ren, H., Bakas, N.A., Vamos, M., *et al.* Design, synthesis, and characterization of an orally active dual-specific ULK1/2 autophagy inhibitor that synergizes with the PARP inhibitor olaparib for the treatment of triple-negative breast cancer. *J. Med. Chem.* **63**(23), 14609-14625 (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.

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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