

PRODUCT INFORMATION



UM-164

Item No. 26188

CAS Registry No.: 903564-48-7

Formal Name: 2-[[6-[4-(2-hydroxyethyl)-1-piperazinyl]-2-methyl-4-pyrimidinyl]amino]-N-[2-methyl-5-[[3-(trifluoromethyl)benzoyl]amino]phenyl]-5-thiazolecarboxamide

MF: $C_{30}H_{31}F_3N_8O_3S$

FW: 640.7

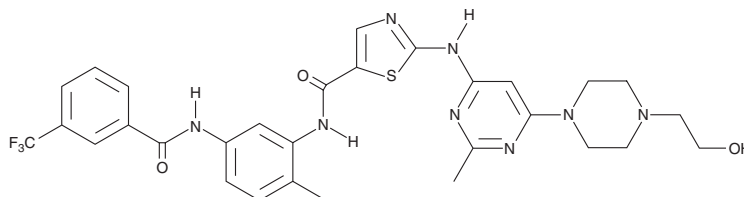
Purity: $\geq 98\%$

UV/Vis.: λ_{max} : 230, 324 nm

Supplied as: A crystalline solid

Storage: $-20^{\circ}C$

Stability: ≥ 4 years



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

Laboratory Procedures

UM-164 is supplied as a crystalline solid. A stock solution may be made by dissolving the UM-164 in the solvent of choice, which should be purged with an inert gas. UM-164 is soluble in the organic solvent DMSO at a concentration of approximately 5 mg/ml.

Description

UM-164 is an inhibitor of Src and p38 MAPK kinases (K_d s = 2.7, 2.2, and 5.5 nM for c-Src, p38 α , and p38 β , respectively).¹ It also inhibits Fyn, Yes, Lyn, Abl, Arg, Ack, Csk, EphB2, EphB4, and Zak by greater than 75% in a kinome profiling assay using MDA-MB-231 cell lysates when used at a concentration of 500 nM. UM-164 inhibits cell growth in a panel of triple-negative breast cancer (TNBC) cell lines (IC_{50} s = 6.1-260 nM) and in a patient-derived TNBC cell line (IC_{50} = 320 nM). In MDA-MB-231 and SUM149 cells, UM-164 (1 μ M) induces cell cycle arrest at the G₁/S phase and inhibits cell motility and invasion when used at concentrations greater than or equal to 50 nM. UM-164 (≥ 10 mg/kg) reduces tumor growth in SUM149 and MDA-MB-231 mouse xenograft models.

Reference

1. Gilani, R.A., Phadke, S., Bao, L.W., *et al.* UM-164: A potent c-Src/p38 kinase inhibitor with *in vivo* activity against triple-negative breast cancer. *Clin. Cancer Res.* **22**(20), 5087-5096 (2016).

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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