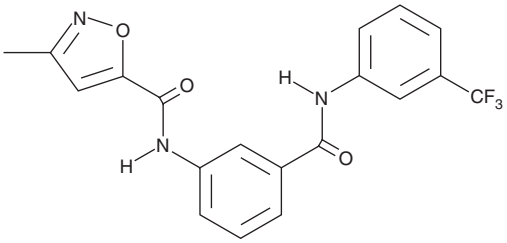
PRODUCT INFORMATION

T5601640

Item No. 22140

CAS Registry No.:	924473-59-6
Formal Name:	3-methyl-N-[3-[[[3-(trifluoromethyl) phenyl]amino]carbonyl]phenyl]-5-isoxazolecarboxamide
Synonym:	T56-LIMKi, T56-LIM Kinase Inhibitor
MF:	$C_{19}H_{14}F_3N_3O_3$
FW:	389.3
Purity:	≥98%
UV/Vis.:	λ_{max}: 210, 233, 273 nm
Supplied as:	A crystalline 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

T5601640 is supplied as a crystalline solid. A stock solution may be made by dissolving the T5601640 in the solvent of choice, which should be purged with an inert gas. T5601640 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of T5601640 in these solvents is approximately 20 and 30 mg/ml, respectively.

T5601640 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, T5601640 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. T5601640 has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

T5601640 is an inhibitor of LIM kinase 2 (LIMK2) that inhibits LIMK2-mediated cofilin phosphorylation.[1] It reduces the levels of phosphorylated cofilin (p-cofilin) in mouse embryonic fibroblasts (MEF) lacking neurofibromin ($Nf1^{-/-}$; IC_{50} = 30 µM), which normally have high levels of p-cofilin. T5601640 (50 µM) decreases actin stress fiber formation, inhibits cell migration, and inhibits colony formation of $Nf1^{-/-}$ MEF cells. It inhibits proliferation of ST88-14, U87, and PANC-1 cells with IC_{50} values of 18.3, 7.4, and 35.2 µM, respectively, and also decreases p-cofilin levels by 20, 24, and 46%, respectively.[2] Oral gavage administration of T5601640 (60 mg/kg) decreases tumor volume and cofilin phosphorylation in a PANC-1 nude mouse xenograft model.

References

1. Mashiach-Farkash, E., Rak, R., Elad-Sfadia, G., *et al.* Computer-based identification of a novel LIMK1/2 inhibitor that synergizes with salirasib to destabilize the actin cytoskeleton. *Oncotarget* **3(6)**, 629-639 (2012).
2. Rak, R., Haklai, R., Elad-Tzfadia, G., *et al.* Novel LIMK2 Inhibitor Blocks Panc-1 Tumor Growth in a mouse xenograft model. *Oncoscience* **1(1)**, 39-48 (2014).

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