

PRODUCT INFORMATION



Rpn-13 Inhibitor TCL1

Item No. 43982

CAS Registry No.: 875165-39-2

Formal Name: 3-[(4bromophenyl)methyl]-6-(4-chlorophenyl)-7H-1,2,4-triazolo[3,4-b][1,3,4]thiadiazine-7-acetic acid

Synonym: TCL-1

MF: $C_{19}H_{14}BrClN_4O_2S$

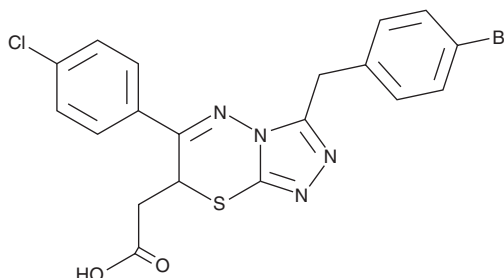
FW: 477.8

Purity: $\geq 98\%$

Supplied as: A 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

Rpn-13 inhibitor TCL1 is supplied as a solid. A stock solution may be made by dissolving the Rpn-13 inhibitor TCL1 in the solvent of choice, which should be purged with an inert gas. Rpn-13 inhibitor TCL1 is slightly soluble (0.1-1 mg/ml) in DMSO.

Description

Rpn-13 inhibitor TCL1 is an inhibitor of UDP-galactopyranose mutase (UGM), also known as RfbD ($K_i = 1.1 \mu M$ for the *K. pneumoniae* enzyme).¹ It also binds to proteasomal ubiquitin receptor ADRM1, also known as proteasome regulatory particle non-ATPase 13 (Rpn-13; $K_d = \sim 26 \mu M$).² Rpn-13 inhibitor TCL1 decreases growth of *M. tuberculosis* and *M. smegmatis* in a disk diffusion assay (MICs = 9.3 and 9.4 $\mu g/ml$, respectively).¹

References

1. Kincaid, V.A., London, N., Wangkanont, K., *et al.* Virtual screening for UDP-galactopyranose mutase ligands identifies a new class of antimycobacterial agents. *ACS Chem. Biol.* **10**(10), 2209-2218 (2015).
2. Loy, C.A., Muli, C.S., Ali, E.M.H., *et al.* Discovery of a non-covalent ligand for Rpn-13, a therapeutic target for hematological cancers. *Bioorg. Med. Chem. Lett.* **95**, 129485 (2023).

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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