

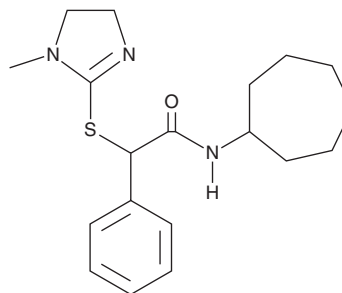
PRODUCT INFORMATION



Apostatin-1

Item No. 45992

CAS Registry No.: 2559703-06-7
Formal Name: N-cycloheptyl- α -[[4,5-dihydro-1-methyl-1Himidazol-2-yl]thio]-benzeneacetamide
Synonym: Apt-1
MF: C₁₉H₂₇N₃OS
FW: 345.5
Purity: $\geq 98\%$
Supplied as: A 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

Apostatin-1 is supplied as a solid. A stock solution may be made by dissolving the apostatin-1 in the solvent of choice, which should be purged with an inert gas. Apostatin-1 is sparingly soluble (1-10 mg/ml) in ethanol and soluble (≥ 10 mg/ml) in DMSO.

Description

Apostatin-1 is an inhibitor of the protein-protein interaction between TNFR1-associated DEATH domain protein (TRADD) and TNF receptor-associated factor 2 (TRAF2).¹ It selectively binds to the N-terminal of TRADD ($K_d = 2.17 \mu\text{M}$) over a panel of 97 kinases at 10 μM . Apostatin-1 inhibits bortezomib-induced apoptosis in Jurkat cells and RIPK1-mediated apoptosis in TNF-stimulated mouse embryonic fibroblasts (MEFs; $\text{IC}_{50}\text{s} = 0.97$ and $1.28 \mu\text{M}$, respectively) and induces autophagy in H4 cells. It inhibits RIPK1-mediated apoptosis, induces autophagy, and reduces tau levels and neurofibrillary tangle-like pathology in a mouse model of Alzheimer's disease and tauopathy.

Reference

1. Xu, D., Zhao, H., Jin, M., *et al.* Modulating TRADD to restore cellular homeostasis and inhibit apoptosis. *Nature* **587(7832)**, 133-138 (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.

WARRANTY AND LIMITATION OF REMEDY

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