

# PRODUCT INFORMATION



**MF094**

Item No. 37774

**CAS Registry No.:** 2241025-68-1

**Formal Name:** αS-[(cyclohexylcarbonyl)amino]-  
N-[5-[[[(1,1-dimethylethyl)amino]  
sulfonyl]-1-naphthalenyl]-  
benzenepropanamide

**MF:** C<sub>30</sub>H<sub>37</sub>N<sub>3</sub>O<sub>4</sub>S

**FW:** 535.7

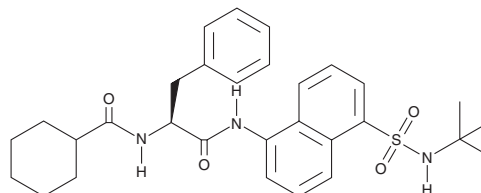
**Purity:** ≥98%

**UV/Vis.:** λ<sub>max</sub>: 210 nm

**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

MF094 is supplied as a solid. A stock solution may be made by dissolving the MF094 in the solvent of choice, which should be purged with an inert gas. MF094 is soluble in DMSO.

## Description

MF094 is a ubiquitin-specific protease 30 (USP30) inhibitor (IC<sub>50</sub> = 0.12 μM).<sup>1</sup> It is selective for USP30 over 22 other USPs at 10 μM. MF094 (0.6, 1.7, and 5 μM) inhibits ubiquitinated probe-induced active site modification of USP30 in mitochondria isolated from C2C12 myoblasts. It induces cell death in HSC-4 cells when used at the concentrations of 0.2, 0.5, 1, and 2 μM.<sup>2</sup> MF094 (1 mg/kg per day) reduces tumor growth in an SCC4 squamous cell carcinoma mouse xenograft model.

## References

1. Kluge, A.F., Lagu, B.R., Maiti, P., *et al.* Novel highly selective inhibitors of ubiquitin specific protease 30 (USP30) accelerate mitophagy. *Bioorg. Med. Chem. Lett.* **28(15)**, 2655-2659 (2018).
2. Zhang, X., Han, Y., Liu, S., *et al.* MF-094 nanodelivery inhibits oral squamous cell carcinoma by targeting USP30. *Cell. Mol. Biol. Lett.* **27(1)**, 107 (2022).

### 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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