

Certificate of Analysis

Print Date: Apr 6th 2023

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Product Name: ±-MF 094 Catalog No.: 6718 Batch No.: 1

CAS Number: 2758431-95-5

IUPAC Name: N-(1-((5-(N-(tert-Butyl)sulfamoyl)naphthalen-1-yl)amino)-1-oxo-3-phenylpropan-2-yl)cyclohexanecarboxamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₃₀H₃₇N₃O₄S.³/₄H₂O

Batch Molecular Weight: 549.21 **Physical Appearance:** Beige solid

Solubility: DMSO to 50 mM Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.5% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 65.61 7.07 7.65 Found 65.61 6.78 7.7

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use



Product Information

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Description:

 \pm -MF 904 is the racemate of MF 904, the S-enantiomer. The S-enantiomer is a selective USP30 (ubiquitin-specific-processing protease 30) inhibitor (IC₅₀ = 120 nM). MF 094 increases protein ubiquitination and accelerates mitophagy.

Physical and Chemical Properties:

Batch Molecular Formula: C₃₀H₃₇N₃O₄S.³/₄H₂O

Batch Molecular Weight: 549.21 Physical Appearance: Beige solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 50 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Li and Liu et al (2020) Recent advances in the development of ubiquitin-specific-processing protease 7 (USP7) inhibitors. Eur.J.Med.Chem. 191 112107. PMID: 32092586.

Kluge et al (2018) Novel highly selective inhibitors of ubiquitin specific protease 30 (USP30) accelerate mitophagy. Bioorg.Med.Chem.Lett. **28** 2655. PMID: 29935771.

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