



Certificate of Analysis

www.tocris.com

Product Name: dTAG-Biotin Catalog No.: 7883 Batch No.: 1

 $IUPAC\ Name: \qquad (R)-3-(3,4-Dimethoxyphenyl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)-1-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno((3aS,4S,6aR)-2-oxohexahydro$

6,9,12-trioxa-3,15-diazaicosyl)oxy)phenyl)propyl (S)-1-((S)-2-(3,4,5-trimethoxyphenyl)butanoyl)piperidine-2-

arboxylate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₅₆H₇₉N₅O₁₅S.H₂O

Batch Molecular Weight: 1112.35 **Physical Appearance:** White solid

Solubility: DMSO to 100 mM Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 98.9% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 60.47 7.34 6.3 Found 59.68 6.9 6.09

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



Product Information

Print Date: Mar 20th 2023

www.tocris.com

Product Name: dTAG-Biotin Catalog No.: 7883

 $IUPAC\ Name: \qquad (R)-3-(3,4-Dimethoxyphenyl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno(3,4-d)imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno(3,4-d)imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno(3,4-d)imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno(3,4-d)imidazol-4-yl)-1-(2-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno(3,4-d)imidazol-4-yl)-1-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno(3,4-d)imidazol-4-yl)-1-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno(3,4-d)imidazol-4-yl)-1-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno(3,4-d)imidazol-4-yl)-1-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno(3,4-d)imidazol-4-yl)-1-((2,16-dioxo-20-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno(3aS,4S,6aR)-4-((3aS,4S,6aR)-4-((3aS,4S,6aR)-4-((3aS,4S,6aR)-4-((3aS,4S,6aR)-4-((3aS,4S,4R)-4-((3aS,4S,4R)-4-((3aS,4S,4R)-4-((3aS,4S,4R)-4-((3aS,4S,4R)-4-((3aS,4S,4R)-4-((3aS,4S,4R)-4-((3aS,4S,4R)-4-((3aS,4S,4R)-4-((3aS,4S,4R)-4-((3aS,4S,4S)-4-((3aS,4S,4S)-4-((3aS,4S)-4-((3aS,4S)-4-((3aS,4S)-4-((3aS,4S)-4-((3aS,4S)-4-((3aS,4S)-4-((3aS,$

6,9,12-trioxa-3,15-diazaicosyl)oxy)phenyl)propyl (S)-1-((S)-2-(3,4,5-trimethoxyphenyl)butanoyl)piperidine-2-

carboxylate

Description:

dTAG-Biotin is an affinity probe for mutant FKBP12F36V proteins. Comprises the ligand ortho-AP1867, selective for F36V single-point mutated FKBP12, joined by a PEG3 linker to biotin. It can be used for chemical biology studies such as proteomics, enrichment studies, dimerization experiments, and assay validation.

Physical and Chemical Properties:

Batch Molecular Formula: C₅₆H₇₉N₅O₁₅S.H₂O

Batch Molecular Weight: 1112.35 Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 mM

This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

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:

Nabet et al (2018) The dTAG system for immediate and target-specific protein degradation. Nat.Chem.Biol. 14 431. PMID: 29581585.

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