



Certificate of Analysis

www.tocris.com

Product Name: Eeyarestatin I Catalog No.: 3922 Batch No.: 5

CAS Number: 412960-54-4

IUPAC Name: 3-(4-Chlorophenyl)-4-[[[(4-chlorophenyl)amino]carbonyl]hydroxyamino]-5,5-dimethyl-2-oxo-1-imidazolidineacetic

acid 2-[3-(5-nitro-2-furanyl)-2-propen-1-ylidene]hydrazide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{27}H_{25}Cl_2N_7O_7$.

Batch Molecular Weight: 630.44

Physical Appearance: Yellow solid

Solubility: DMSO to 100 mM

Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 98.5% purity

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

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 51.44 4 15.55 Found 51.44 3.96 15.58

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



Product Information

Print Date: Nov 11th 2022

www.tocris.com

Product Name: Eeyarestatin I Catalog No.: 3922 5

CAS Number: 412960-54-4

IUPAC Name: 3-(4-Chlorophenyl)-4-[[[(4-chlorophenyl)amino]carbonyl]hydroxyamino]-5,5-dimethyl-2-oxo-1-imidazolidineacetic

acid 2-[3-(5-nitro-2-furanyl)-2-propen-1-ylidene]hydrazide

Description:

Eeyarestatin I is a potent inhibitor of endoplasmic reticulum associated protein degradation (ERAD). Specifically targets the p97-associated deubiquitinating process (PAD) and inhibits ataxin-3 (atx3)-dependent deubiquitination. Also inhibits Sec61-mediated protein translocation at the ER. Displays cytotoxic activity preferentially against cancer cells; induces cell death via the proapoptotic protein NOXA. Also enhances adeno-associated viral transduction in multiple cells types.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₇H₂₅Cl₂N₇O₇.

Batch Molecular Weight: 630.44 Physical Appearance: Yellow solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 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:

Berry and Asokan *et al* (2016) Chemical modulation of endocytic sorting augments adeno-associated viral transduction. J.Biol.Chem. **291** 939. PMID: 26527686.

Aletrari et al (2011) Eeyarestatin 1 interferes with both retrograde and anterograde intracellular trafficking pathways. PLoS One 6 e22713. PMID: 21799938.

Cross et al (2009) Eeyarestatin I inhibits Sec61-mediated protein translocation at the endoplasmic reticulum. J.Cell Science 122 4393.

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