

Certificate of Analysis

Print Date: May 12th 2017 **WWW.tocris.com**

Product Name: Y-29794 oxalate Catalog No.: 1634 Batch No.: 1

CAS Number: 146794-84-5

IUPAC Name: [2-[[8-(Dimethylamino)octyl]thio]-6-(1-methylethyl)-3-pyridinyl]-2-thienylmethanone oxalate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{23}H_{34}N_2OS_2.C_2H_2O_4$

Batch Molecular Weight: 508.69 **Physical Appearance:** White solid

Solubility: ethanol to 15 mM with gentle warming

DMSO to 15 mM

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.63$ (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])

Melting Point: At 128°C

HPLC: Shows 96.8% purity

¹H NMR: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 59.03 7.13 5.5 Found 59.19 7.29 5.42



Product Information

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Description:

Inhibitor of prolyl endopeptidase, a serine peptidase that may be implicated in the biosynthesis of amyloid β -peptide. Potently inhibits rat brain prolyl endopeptidase ($K_{\rm i}$ = 0.95 nM) in vitro, and prevents amyloid β -peptide deposition in vivo. Orally active and brain penetrant.

Physical and Chemical Properties:

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Batch Molecular Weight: 508.69 Physical Appearance: White solid

Minimum Purity: >96%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

ethanol to 15 mM with gentle warming

DMSO to 15 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:

Kato et al (1997) Prevention of amyloid-like deposition by a selective prolyl endopeptidase inhibitor, Y-29794, in senescence-accelerated mouse. J.Pharmacol.Exp.Ther. 283 328. PMID: 9336340.

Nakajima et al (1992) Y-29794 - a non-peptide prolyl endopeptidase inhibitor that can penetrate into the brain. Neurosci.Lett. 141 156. PMID: 1436628.