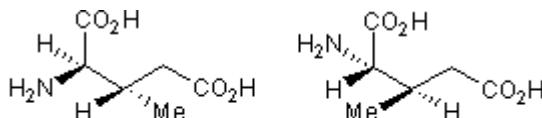


Certificate of Analysiswww.tocris.com**Product Name:** (\pm)-*threo*-3-Methylglutamic acid**Catalog No.:** 0811**Batch No.:** 6**CAS Number:** 63088-04-0**1. PHYSICAL AND CHEMICAL PROPERTIES****Batch Molecular Formula:** C₆H₁₁NO₄**Batch Molecular Weight:** 161.16**Physical Appearance:** White crystalline powder**Solubility:** 1eq. NaOH to 100 mM**Storage:** Store at RT**Batch Molecular Structure:**

(1:1 mixture of enantiomers)

2. ANALYTICAL DATA**TLC:** R_f = 0.24 (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])**Melting Point:** Between 167 - 169°C**HPLC:** Shows >99.5% purity**¹H NMR:** Consistent with structure**Mass Spectrum:** Consistent with structure**Microanalysis:** Carbon Hydrogen Nitrogen

Theoretical 44.72 6.88 8.69

Found 44.66 6.89 8.61

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

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Product Name: (\pm)-*threo*-3-Methylglutamic acid

Catalog No.: 0811

Batch No.: 6

CAS Number: 63088-04-0

Description:

A potent blocker of glutamate transport; selective for EAAT2 and EAAT4 (IC₅₀ values are 90, 109, 1600 and 1080 μ M for EAAT2, EAAT4, EAAT1 and EAAT3 respectively).

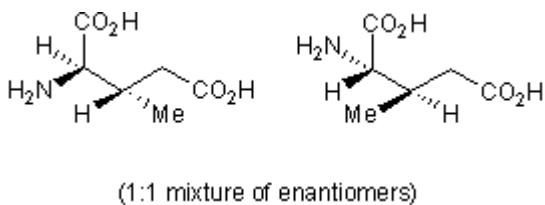
Physical and Chemical Properties:

 Batch Molecular Formula: C₆H₁₁NO₄

Batch Molecular Weight: 161.16

Physical Appearance: White crystalline powder

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Store at RT

Solubility & Usage Info:

1eq. NaOH 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:

Vandenberg *et al* (1997) Contrasting modes of action of methylglutamate derivatives on the excitatory amino acid transporters, EAAT1 and EAAT2. *Mol.Pharmacol.* **51** 809. PMID: 9145919.

Mitrovic *et al* (1998) Identification of functional domains of the human glutamate transporters EAAT1 and EAAT2. *J.Biol.Chem.* **273** 14698. PMID: 9614067.

Eliasof *et al* (2001) Pharmacological characterization of *threo*-3-methylglutamic acid with excitatory amino acid transporters in native and recombinant systems. *J.Neurochem.* **77** 550. PMID: 11299317.

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