Product Name: ZJ 43
Catalog No.: 2675
Batch No.: 3
CAS Number: 72331-20-2
IUPAC Name: N-[[1(S)-1-Carboxy-3-methylbutyl]amino]carbonyl]-L-glutamic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

   Batch Molecular Formula: \( \text{C}_{12}\text{H}_{20}\text{N}_{2}\text{O}_{7} \cdot \frac{1}{4}\text{H}_{2}\text{O} \)
   Batch Molecular Weight: 308.8
   Physical Appearance: White solid
   Solubility: water to 100 mM
               DMSO to 100 mM
   Storage: Store at -20°C
   Batch Molecular Structure:

2. ANALYTICAL DATA

   \(^1\text{H} \text{NMR}:\) Consistent with structure
   Mass Spectrum: Consistent with structure
   Microanalysis:
   Carbon Hydrogen Nitrogen
   Theoretical 46.67 6.69 9.07
   Found 46.49 6.71 8.99

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Description:
Potent inhibitor of glutamate carboxypeptidase II and III (GCP II and III/NAAG peptidase/NAALADase) (K_i values are 0.8 and 23 nM respectively) that inhibits the hydrolysis of NAAG (IC_{50} = 2.4 nM). Does not directly interact with NMDA or metabotropic glutamate receptors. Reduces neuronal degeneration in a rat model of traumatic brain injury (TBI) and reduces locomotor activity in the PCP-model of schizophrenia.

Physical and Chemical Properties:
Batch Molecular Formula: C_{12}H_{20}N_{2}O_{7}·\frac{1}{4}H_{2}O
Batch Molecular Weight: 308.8
Physical Appearance: White solid

Storage: Store at -20°C

Solubility & Usage Info:
water to 100 mM
DMSO to 100 mM

When purchased as a 1mg unit, 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: