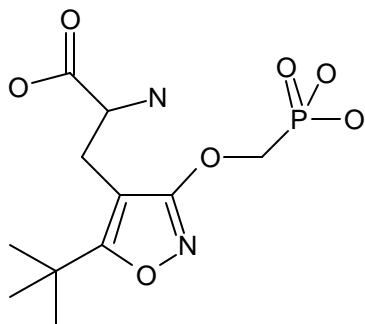


Product Information

ATPO

Product Number **A 7845**
Store at Room Temperature



CAS#: 252930-37-3

Synonym: (R,S)-2-Amino-3-[5-tert-butyl-3-(phosphonomethoxy)-4-isoxazolyl]propionic acid

Product Description

Molecular Formula: $C_{11}H_{19}N_2O_7P$

Molecular Weight: 322.26

Purity: Approx. 99% (HPLC)

ATPO is a competitive antagonist at GluR1-4 (AMPA-preferring) ionotropic glutamate receptors. It is a weak partial agonist at GluR5 and GluR5/KA2 hetero-oligomeric receptors, but is inactive at GluR6 and GluR6/KA2 heterooligomeric receptors. GluR5, GluR6, and KA2 are kainic acid-preferring ionotropic glutamate

receptors. ATPO is not recognized by NMDA-preferring ionotropic glutamate receptors.¹⁻³

Preparation Instructions

ATPO is soluble at 7 mg/ml in 1N NaOH; it is slightly soluble in water (1 mg/ml) and insoluble in DMSO.

Storage/Stability

Store tightly sealed at room temperature.

References

1. Wahl, P., et al., Antagonist properties of a phosphono isoxazole amino acid at glutamate R1-4 (R,S)-2-amino-3-(3-hydroxy-5-methyl-4-isoxazolyl)propionic acid receptor subtypes. *Mol. Pharmacol.*, **53**, 590-596 (1998).
2. Madsen, U. et al., Synthesis and pharmacology of highly selective carboxy and phosphono isoxazole amino acid AMPA receptor antagonists. *J. Med. Chem.*, **39**, 1682-1691 (1996).
3. Moller, E.H., et al., Resolution, absolute stereochemistry, and enantiopharmacology of the GluR1-4 and GluR5 antagonist 2-amino-3-[5-tert-butyl-3-(phosphonomethoxy)-4-isoxazolyl]propionic acid. *Chirality*, **11**, 752-759 (1999).

MJE 01/02

Sigma brand products are sold through Sigma-Aldrich, Inc.

Sigma-Aldrich, Inc. warrants that its products conform to the information contained in this and other Sigma-Aldrich publications. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see reverse side of the invoice or packing slip.