Product Name: (-)-p-Bromotetramisole Oxalate

Chemical Properties

Product Name: (-)-p-Bromotetramisole Oxalate
Cas No.: 62284-79-1
M.Wt: 373.22
Formula: C13H13BrN2O4S

Chemical Name:
Canonical SMILES: BrC(C=1)=CC=C1[C@H]2N=C3SCN3C2.OC(O)=O

Solubility: >18.7mg/mL in DMSO

Storage: Desiccate at -20°C

General tips: For obtaining a higher solubility, please warm the tube at 37°C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shopping Condition: Evaluation sample solution: ship with blue ice
All other available size: ship with RT, or blue ice upon request

Biological Activity

Targets: Metabolism
Pathways: ALP

Description:
(-)-p-Bromotetramisole Oxalate (L-(-)-p-Bromotetramisole Oxalate, L-p-Bromotetramisole Oxalate, (-)-4-Bromotetramisole Oxalate) is a potent and non-specific inhibitor of alkaline phosphatase and is also an inhibitor of protein tyrosine phosphatases [1] [2]. Alkaline phosphatase is a hydrolase enzyme that removes phosphate groups from nucleotides, proteins and alkaloids. Protein tyrosine phosphatase is an enzyme that removes phosphate groups from phosphorylated tyrosine residues on target proteins.

(-)-p-Bromotetramisole Oxalate is an inhibitor of alkaline phosphatase and protein tyrosine phosphatases. In various rat tissues, (-)-p-Bromotetramisole Oxalate (0.1 μM) completely inhibited non-specific alkaline phosphatase [1]. In rat zona glomerulosa, (-)-p-Bromotetramisole Oxalate (100 μM) blocked the inhibition of Na+ pump (Na+, K+-ATPase) induced by angiotensin II. The result suggested that inhibition of the Na+ pump induced by angiotensin II might be mediated by a tyrosine phosphatase [2]. In neurosecretory PC12 cells, (-)-p-Bromotetramisole Oxalate (0.3 mM) increased ionomycin-stimulated noradrenaline (NA) release, which suggested that tyrosine phosphorylation regulated Ca2+-stimulated NA release [3]. In Sprague-Dawley rats, (-)-p-Bromotetramisole Oxalate (10 μM) significantly increased fractional excretion of phosphate (FEPi) from 4.7% to 13.4% [4].

Reference:

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.