MRS2500 tetraammonium

Cat. No.: HY-108658
CAS No.: 630103-23-0
Molecular Formula: C₁₃H₃₀IN₉O₈P₂
Molecular Weight: 629.28
Target: P2Y Receptor
Pathway: GPCR/G Protein
Storage: Please store the product under the recommended conditions in the COA.

BIOLOGICAL ACTIVITY

Description
MRS2500 tetraammonium is a potent, selective and stable antagonist of the P2Y₁ receptor (Kᵢ=0.78 nM for recombinant human P2Y1 receptor). MRS2500 tetraammonium inhibits the ADP-induced aggregation of human platelets with an IC₅₀ value of 0.95 nM. Antithrombotic activity[1][2][3].

In Vitro
MRS2500 tetraammonium inhibits platelet aggregation to 10 μM ADP with an IC₅₀ of 0.95 nM in human washed platelets. MRS2500 tetraammonium inhibits platelet aggregation to 10μM ADP with an IC₅₀ of 0.49 μM in human PRP [4].

In Vivo
MRS2500 (2 mg/kg; i.v.) decreases acute systemic thromboembolism through selective inhibition of the P2Y₁ receptor[3]. MRS2500 exhibited strong antithrombotic efficacy in the prevention of arterial thrombosis in the monkey ECAT model [4].

Animal Model: 20-25 g WT Male mice (acute vascular occlusion model)[3]
Dosage: 2 mg/kg
Administration: Intravenous
Result: Reduced platelet consumption.

REFERENCES