
Product Data Sheet

Product Name: 2-Methylthio-AMP

Cat. No.: GC64027

Chemical Properties

Cas. No. 22140-20-1

Formula C₁₁H₁₆N₅O₇PS

M.Wt 393.31

Solubility DMSO : 100 mg/mL (254.25 mM; Need ultrasonic) Storage Store 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.

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

Structure

Background

2-Methylthio-AMP (2-MeSAMP) is a selective and direct P2Y₁₂ antagonist. 2-Methylthio-AMP is an inhibitor of ADP-dependent platelet aggregation[1][2][3].

2-Methylthio-AMP (2-MeSAMP) inhibits agonist-mediated α IIb β 3 activation in platelets[1]. 2-methylthio-AMP (50 μ M; for 5 minutes) does not significantly inhibit thrombin, PAR1-AP, PAR4-AP, or ADP-mediated platelet Ca²⁺ mobilization. 2-methylthio-AMP fails to inhibit Ca²⁺ mobilization in P2Y₁₂-deficient mouse platelets and does not raise cAMP or induce vasodilator-stimulated phosphoprotein phosphorylation in wild-type platelets[1].

[1]. John H Cleator, et al. Racial differences in resistance to P2Y₁₂ receptor antagonists in type 2 diabetic subjects. J Pharmacol Exp Ther. 2014 Oct;351(1):33-43.

[2]. Bernhard H Rauch, et al. Regulation of functionally active P2Y₁₂ ADP receptors by thrombin in human smooth muscle cells and the presence of P2Y₁₂ in carotid artery lesions. Arterioscler Thromb Vasc Biol. 2010 Dec;30(12):2434-42.

[3]. A Malinin, et al. Validation of a VerifyNow-P2Y₁₂ cartridge for monitoring platelet inhibition with clopidogrel. Methods Find Exp Clin Pharmacol. 2006 Jun;28(5):315-22.

Caution: Product has not been fully validated for medical applications. For research use only.

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