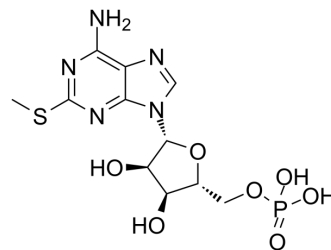


2-Methylthio-AMP

Cat. No.:	HY-125989
CAS No.:	22140-20-1
Molecular Formula:	C ₁₁ H ₁₆ N ₅ O ₇ PS
Molecular Weight:	393.31
Target:	P2Y Receptor
Pathway:	GPCR/G Protein
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	2-Methylthio-AMP (2-MeSAMP) is a selective and direct P2Y ₁₂ antagonist. 2-Methylthio-AMP is an inhibitor of ADP-dependent platelet aggregation ^{[1][2][3]} .
IC₅₀ & Target	P2Y ₁₂ ^[1]
In Vitro	2-Methylthio-AMP (2-MeSAMP) inhibits agonist-mediated α _{IIb} β ₃ activation in platelets ^[1] . 2-methylthio-AMP (50 μM; for 5 minutes) does not significantly inhibit thrombin, PAR1-AP, PAR4-AP, or ADP-mediated platelet Ca ²⁺ mobilization. 2-methylthio-AMP fails to inhibit Ca ²⁺ mobilization in P2Y ₁₂ -deficient mouse platelets and does not raise cAMP or induce vasodilator-stimulated phosphoprotein phosphorylation in wild-type platelets ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [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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