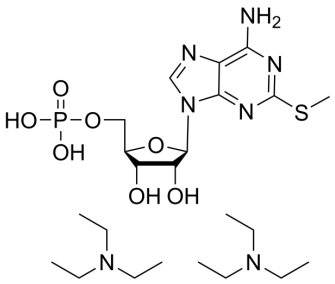
2-Methylthio-AMP diTEA

Cat. No.:	HY-125989B
CAS No.:	1227193-98-7
Molecular Formula:	$C_{23}H_{46}N_7O_7PS$
Molecular Weight:	595.69
Target:	P2Y Receptor
Pathway:	GPCR/G Protein
Storage:	-20°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



BIOLOGICAL ACTIVITY

Description	2-Methylthio-AMP (2-MeSAMP) diTEA is a selective and direct $P2Y_{12}$ antagonist. 2-Methylthio-AMP diTEA is an inhibitor of ADP-dependent platelet aggregation[1][2][3].
IC_{50} & Target	P2Y12 Receptor
In Vitro	2-Methylthio-AMP (2-MeSAMP) diTEA inhibits agonist-mediated $\alpha_{IIb}\beta_3$ activation in platelets[1]. 2-methylthio-AMP (50 μM; for 5 minutes) diTEA does not significantly inhibit thrombin, PAR1-AP, PAR4-AP, or ADP-mediated platelet Ca^{2+} mobilization. 2-methylthio-AMP diTEA 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.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA