Product Data Sheet

Product Name: 4-Methylamino antipyrine hydrochloride
Cat. No.: GC60523

Chemical Properties

Cas. No.	856307-27-2		
SMILES	O=C1N(C2=CC=CC=C2)N(C)C(C)=C1NC.[H]Cl		
Formula	$C_{12}H_{16}ClN_3O$	M.Wt	253.73
Solubility		Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ 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

4-Methylaminoantipyrine is a major active metabolite of the non-opioid prodrug metamizole .[1] It is formed from metamizole by non-enzymatic hydrolysis in the gastrointestinal tract.[2] 4-Methylaminoantipyrine (0.1 mM) inhibits production of prostaglandin E_2 induced by the calcium ionophore A23187 in isolated mouse peritoneal macrophages.[3] It increases the paw withdrawal threshold in a rat model of carrageenan-induced hyperalgesia when administered at a dose of 160 ?g/paw.[4] 4-Methylaminoantipyrine (60, 90, and 120 mg/kg) reduces LPS-induced pyrexia in rats.[5] It is also a potential impurity found in commercial preparations of metamizole.[6]

1.Rogosch, T., Sinning, C., Podlewski, A., et al.Novel bioactive metabolites of dipyrone (metamizol)Bioorg. Med. Chem.20(1)101-107(2012) 2.Nikolova, I., Tencheva, J., Voynikov, Y., et al.Metamizole: A review profile of a well-known “forgotten” drug. Part I: Pharmaceutical and nonclinical profileBiotechnol. Biotechnol. Equip.26(6)3329-3337(2012) 3.Brune, K., Aehringhaus, U., and Peskar, B.A.Pharmacological control of leukotriene and prostaglandin production from mouse peritoneal macrophagesAgents

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Actions14(5-6)729-734(1984) 4.Gon?alves Dos Santos, G., Vieira, W.F., Vendramini, P.H., et al.Dipyrone is locally hydrolyzed to 4-methylaminoantipyrine and its antihyperalgesic effect depends on CB2 and κ-opioid receptors activationEur. J. Pharmacol.874173005(2020) 5.Malvar, D.d.C., Aguiar, F.A., Vaz Ade, L., et al.Dipyrone metabolite 4-MAA induces hypothermia and inhibits PGE2 -dependent and -independent fever while 4-AA only blocks PGE2 -dependent feverBr. J. Pharmacol.171(15)3666-3679(2014) 6.Vieira, J.C., Sversut, R.A., Maciel, I.T., et al.HPLC–DAD method for simultaneous determination of dipyrone (metamizole) and caffeine in tablets and identification of major degradation product by direct infusion ESI–MSChromatographia80(3)489–495(2017)

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA