Product Data Sheet

Product Name: AM 1172
Cat. No.: GC12972

Chemical Properties

Cas. No.	251908-92-6		
Chemical Name	4-hydroxy-N-((5E,8E,11E,14E)-icosa-5,8,11,14-tetraen-1-yl)benzamide		
SMILES	O=C(C(C=C1)=CC=C1O)NCCCC/C=C/C/C=C/C/C=C/C/C=C/CCCCC		
Formula	$C_{27}H_{39}NO_2$	M.Wt	409.6
Solubility	DMF: 30 mg/ml,DMSO: 30 mg/ml,Ethanol: 30 mg/ml,PBS (pH 7.2): .15 mg/ml	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	AM 1172		

Background

AM 1172 is a potent and selective inhibitor of stable anandamide uptake with IC50 of 2.1 - 2.5 μM and fatty acid amide hydrolase (FAAH) with Ki of 3.18 μM.

FAAH, a member of serine hydrolase enzyme family, is an integral membrane hydrolase that hydrolyzes bioactive amides, including anandamide, to free fatty acid and ethanolamine. In vitro, FAAH displays esterase and amidase activity. In vivo, this protein acts as the principal catabolic enzyme for a class of bioactive lipids called the fatty acid amides (FAAs).

AM1172 blocked [3H] anandamide internalization in rodent cortical neurons and human astrocytoma cells but not acted as an inhibitor of FAAH 1. In mouse cortical neurons, This component also blocked the uptake of tritiated AEA with an EC50 of about 1.5 μM 1.

Regarding the effect of AM 1172 administration in vivo, the evidence should be provided

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

by performing the study in human or mice or other animal models.

Reference:
1. Fegley D, Kathuria S, Mercier R, et al. Anandamide transport is independent of fatty-acid amide hydrolase activity and is blocked by the hydrolysis-resistant inhibitor AM1172. Proceedings of the National Academy of Sciences of the United States of America. 2004;101(23):8756-8761.