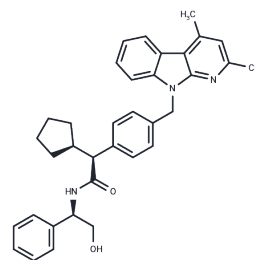


Implitapide

Chemical Properties

CAS No. :	177469-96-4
Formula:	C ₃₅ H ₃₇ N ₃ O ₂
Molecular Weight:	531.69
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Implitapide is an inhibitor of microsomal triglyceride transfer protein (MTP).
Targets(IC50)	CETP,MTP,MTP
In vitro	Implitapide inhibits MTP activity using a recombinant human form complexed with protein disulphide isomerase (IC ₅₀ =10 nM). Implitapide also inhibits the secretion of apoB-containing very low-density lipoprotein (VLDL)-like lipoproteins from a human hepatoma cell (HepG2) (IC ₅₀ : 1.1 nM)[1].
In vivo	Administering Implitapide (3.2 mg/kg/d) significantly inhibits lipid-stained lesions in mice on a Western-type diet (WD), reducing lesion area by 83% compared to the WD group (p<0.01) and substantially lowering plasma lipid levels to near or below those on a chow diet (CD) at both 4 and 8 weeks of treatment (p<0.01). Furthermore, this dosage of Implitapide markedly reduces lipid-stained aortic lesions by 83% in apoE knockout (KO) mice. In addition, apoE KO mice fed a WD supplemented with varying doses of Implitapide (1, 5, and 15 mg/kg/d) for 14 weeks exhibit a significant decrease in both plaque area (66, 78, and 93% reduction, respectively) and lipid content within plaques (to 4.3, 2.6, and 0%, respectively, compared with 9.5% in controls)[1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8808 mL	9.404 mL	18.808 mL
5 mM	0.3762 mL	1.8808 mL	3.7616 mL
10 mM	0.1881 mL	0.9404 mL	1.8808 mL
50 mM	0.0376 mL	0.1881 mL	0.3762 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Ueshima K, et al. Implitapide, a microsomal triglyceride transfer protein inhibitor, reduces progression of atherosclerosis in apolipoprotein E knockout mice fed a Western-type diet: involvement of the inhibition of postprandial triglyceride elevation. *Biol Pharm Bull.* 2005 Feb;28(2):247-52.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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