Lomitapide
Item No. 10009610

CAS Registry No.: 182431-12-5
Formal Name: N-(2,2,2-trifluoroethyl)-9-[4-[[4-[4 במיוחד|[[4-[(trifluoromethyl)][1,1'-biphenyl]-2-yl]carbonyl]amino]-1-piperidinyl]butyl]-9H-fluorene-9-carboxamide
Synonyms: AEGR 773, BMS 201038
MF: C39H37F6N3O2
FW: 693.7
Purity: ≥98%
UV/Vis.: λmax: 232, 259 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Lomitapide is supplied as a crystalline solid. A stock solution may be made by dissolving the lomitapide in the solvent of choice, which should be purged with an inert gas. Lomitapide is soluble in organic solvents such as ethanol and DMSO. The solubility of lomitapide in these solvents is approximately 10 and 5 mg/ml, respectively.

Description

Lomitapide is an inhibitor of microsomal triglyceride transfer protein (MTTP; IC50 = 0.5 nM in a triglyceride transfer assay).1 It inhibits apolipoprotein B (ApoB) secretion in HepG2 cells (EC50 = 0.8 nM). Lomitapide inhibits triglyceride secretion in fasted rats (ED50 = 0.19 mg/kg, p.o.) and reduces total plasma cholesterol levels in hamsters (ED50 = 2.4 mg/kg). It also decreases plasma cholesterol and triglyceride levels in the Watanabe-heritable hyperlipidemic (WHHL) rabbit model of homozygous familial hypercholesterolemia when administered at a dose of 10 mg/kg. Formulations containing lomitapide have been used as an adjunct to a low-fat diet and other lipid-lowering treatments in the treatment of homozygous familial hypercholesterolemia.

Reference