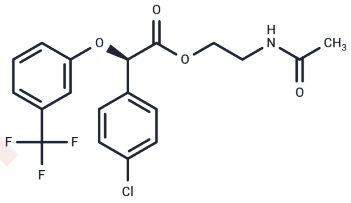
Data Sheet (Cat.No.T16022)

TargetMol

Arhalofenate

Chemical Properties



CAS No. : 24136-23-0

Formula: C19H17ClF3NO4

Molecular Weight: 415.79

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	Arhalofenate (JNJ 39659100) is a selective partial agonist of peroxisome proliferator-activated receptor PPARγ. It is used for the treatment of type 2 diabetes.
Targets(IC50)	PPAR
In vitro	Arhalofenate displays a dose-dependent activation of mouse GAL4-PPAR-γ (EC50s: appr 12 μM). Arhalofenate is a prodrug ester, that is rapidly and completely modified in vivo by non-specific serum esterases to the mature free acid form Arhalofenate (MBX 102) acid. [2].
In vivo	MBX-102 significantly reduces fasting blood glucose, confirming that Arhalofenate (MBX 102) is an efficacious antidiabetic agent. Arhalofenate (60 mg/kg) causes a dramatic decrease in plasma and also results in a dose-dependent, significant decrease in the insulin resistance indexinsulin levels[1]. Arhalofenate (100 mg/kg, p.o.) obviously increases the glucose infusion rate and decreases hepatic glucose output in the clamped state in Zucker Diabetic Fatty (ZDF) rats. Arhalofenate (100 mg/kg, p.o.) significantly reduces triglyceride, free fatty acid, and cholesterol levels in ZDF rats. Arhalofenate (100 mg/kg, p.o.) also significantly lowers fasting plasma insulin, and robustly decreases fasting plasma triglycerides after 32 days of treatment in Zucker Fatty (ZF) rats[2].

Solubility Information

Solubility	DMSO: 132.5 mg/mL (318.67 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4051 mL	12.0253 mL	24.0506 mL
5 mM	0.481 mL	2.4051 mL	4.8101 mL
10 mM	0.2405 mL	1.2025 mL	2.4051 mL
50 mM	0.0481 mL	0.2405 mL	0.481 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

Gregoire FM, et al. MBX-102/JNJ39659100, a novel peroxisome proliferator-activated receptor-ligand with weak transactivation activity retains antidiabetic properties in the absence of weight gain and edema. Mol Endocrinol. 2009 Jul;23(7):975-88.
Chandalia A, et al. MBX-102/JNJ39659100, a novel non-TZD selective partial PPAR-γ agonist lowers triglyceride independently of PPAR-α activation. PPAR Res. 2009;2009:706852.