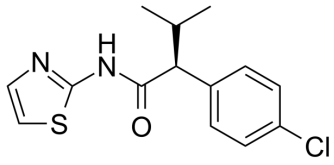
AMG7703

Cat. No.:	HY-114011
CAS No.:	1103523-24-5
Molecular Formula:	$C_{14}H_{15}ClN_2OS$
Molecular Weight:	294.8
Target:	Free Fatty Acid Receptor
Pathway:	GPCR/G Protein
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (339.21 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.3921 mL	16.9607 mL	33.9213 mL
	5 mM	0.6784 mL	3.3921 mL	6.7843 mL
	10 mM	0.3392 mL	1.6961 mL	3.3921 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

AMG7703 is a selective and allosteric agonists of FFA2 (GPR43), the receptor for short-chain fatty acids (SCFAs), acetate, and propionate. AMG7703 can be used to research for in inflammatory and metabolic[1].

In Vitro

AMG7703 (phenylacetamide 1) (30 μM) shows selectivity on FFA2 (GPR43) over FFA1 (GPR40) and FFA3 (GPR41) with in Chinese hamster ovary cells[1].

AMG7703 (0.041, 0.123, 0.37, 1.11 μM) acts as an FFA2 allosteric agonist, activates $G\alpha_i$ coupled signaling pathway[1].

AMG7703 (1, 3, 10, 30 μM) results in $G\alpha_i$-dependent inhibition of lipolysis in adipocytes (3T3L1)[1].

AMG7703 (0.041, 0.123, 0.37, 1.11 μM) exhibits allosteric activity and inhibits $G\alpha_i$-coupled cAMP with IC_{50} values of 0.7 μM (hFFA2) and 0.96 μM (mFFA2), respectively; as for $G\alpha_q$-coupled aequorin inhibition, with EC_{50}s of 0.45 μM (hFFA2) and 1.27 μM (mFFA2), respectively[1].

AMG7703 (0-1 μM) shows the positive cooperating effect of acetate and stimulates calcium mobilization in a concentration-dependent manner in CHO cell stably expressing hFFA2 and aequorin[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Lee T, et al. Identification and functional characterization of allosteric agonists for the G protein-coupled receptor FFA2. Mol Pharmacol. 2008 Dec. 74(6):1599-609.

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