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Product Data Sheet

GPR40 agonist 6

Cat. No.:	HY-147351
CAS No.:	1798751-25-3
Molecular Formula:	$C_{20}H_{19}NO_4$
Molecular Weight:	337.37
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
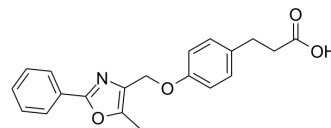
SOLVENT & SOLUBILITY

In Vitro	DMSO : 125 mg/mL (370.51 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.9641 mL	14.8205 mL	29.6410 mL
	5 mM	0.5928 mL	2.9641 mL	5.9282 mL
	10 mM	0.2964 mL	1.4821 mL	2.9641 mL

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

BIOLOGICAL ACTIVITY

Description	GPR40 agonist 6 (Compound 7a) is a potent and selective free fatty acid receptor 1 (FFAR1 or GPR40) agonist with an EC_{50} of 0.058 μM[1].
IC_{50} & Target	EC_{50}: 0.058 μM (GPR40)[1]
In Vitro	GPR40 agonist 6 (Compound 7a) shows a very favorable ADME profile, and shows no significant inhibition of the principal cytochrome P450 isoforms (1A2, 2C9, 2C19, 2D6 and 3A4) at 5 μM[1]. ADME profile for GPR40 agonist 6 (Compound 7a)[1]

	GPR40 agonist 6 (Compound 7a)
Plasma protein binding (human)[a]	98.6%

Aqueous solubility (PBS, pH 7.4)[b]	404 µM
Microsomal stability (mouse, t1/2)[c]	434 min
A-B permeability (Caco-2, cm•s^{-1})[d]	15.2 • 10^{-6}

[a]Each value is an average of n = 4, measured at c = 1 µM.
[b]Each value is an average of n = 2.
[c]Each value is an average of n = 5, measured at c = 2 µM.
[d]Each value is an average of n = 2, measured at c = 10 µM.
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Zahanich I, et al. Phenoxymethyl 1,3-oxazoles and 1,2,4-oxadiazoles as potent and selective agonists of free fatty acid receptor 1 (GPR40). Bioorg Med Chem Lett. 2015 Aug 15;25(16):3105-11.

Caution: Product has not been fully validated for medical applications. For research use only.

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