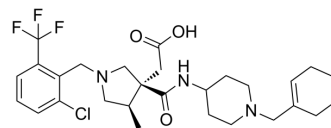


E6130

Cat. No.:	HY-107456		
CAS No.:	1427058-33-0		
Molecular Formula:	C ₂₈ H ₃₇ ClF ₃ N ₃ O ₃		
Molecular Weight:	556.06		
Target:	CX3CR1		
Pathway:	Immunology/Inflammation		
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 : ≥ 250 mg/mL (449.59 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.7984 mL	8.9918 mL	17.9837 mL
	5 mM	0.3597 mL	1.7984 mL	3.5967 mL
	10 mM	0.1798 mL	0.8992 mL	1.7984 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
 Solubility: ≥ 2.08 mg/mL (3.74 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
 Solubility: ≥ 2.08 mg/mL (3.74 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.08 mg/mL (3.74 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

E6130 is an orally active and highly selective CX3CR1 modulator, that may be effective for treatment of inflammatory bowel disease.

IC₅₀ & Target

CX3CR1^[1]

In Vitro

E6130 is an orally active and highly selective CX3CR1 modulator, inhibits the fractalkine-induced chemotaxis of human

peripheral blood natural killer cells (IC₅₀, 4.9 nM), and down-regulates CX3CR1 on the cell surface of CD56⁺ NK cells with an EC₅₀ value of 5.2 nM. E6130 also shows agonistic activity via CX3CR1 with respect to GTPγS binding (EC₅₀ = 133 nM) and β-arrestin recruitment (EC₅₀ = 2.4 μM) in CX3CR1-expressing CHO-K1 membrane but show no antagonistic activity^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

E6130 (10 or 30 mg/kg, p.o.) reduces several inflammatory bowel disease-related parameters in a murine CD4⁺ CD45RB^{high} T-cell-transfer colitis model and a murine oxazolone-induced colitis model^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Cancers (Basel). 2022, 14(1), 64.

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REFERENCES

[1]. Wakita H, et al. E6130, a Novel CX3C Chemokine Receptor 1 (CX3CR1) Modulator, Attenuates Mucosal Inflammation and Reduces CX3CR1+ Leukocyte Trafficking in Mice with Colitis. Mol Pharmacol. 2017 Nov;92(5):502-509.

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

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