Proteins

Lodenafil

Cat. No.: HY-123210 CAS No.: 139755-85-4 Molecular Formula: $C_{23}H_{32}N_6O_5S$

Molecular Weight: 504.6

Target: Phosphodiesterase (PDE) Pathway: Metabolic Enzyme/Protease

Storage:

Powder -20°C 3 years

 $4^{\circ}C$ 2 years In solvent -80°C 2 years

> -20°C 1 year

Product Data Sheet

SOLVENT & SOLUBILITY

In Vitro DMSO: ≥ 250 mg/mL (495.44 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.9818 mL	9.9088 mL	19.8177 mL
	5 mM	0.3964 mL	1.9818 mL	3.9635 mL
	10 mM	0.1982 mL	0.9909 mL	1.9818 mL

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

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (4.12 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (4.12 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	$Loden a fill is a potent phosphodie sterase \ type \ 5 \ (PDE5) \ in hibitor \ for \ the \ treatment \ of \ erectile \ dysfunction \ (ED)^{[1]}.$
IC ₅₀ & Target	PDE5
In Vitro	Lodenafil (0-100 μ M, 20 min) induces relaxations in Phenylephrine (10 μ M)-precontracted rabbit and human strips corpus cavernosum ^[1] . Lodenafil (0-1 μ M, 5 min) inhibits cGMP hydrolysis (IC ₅₀ : 0.022 μ M) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

 $Lodenafil~(10~mg, p.o., male~Beagle~dogs, PK~assay)~shows~a~T_{1/2}~of~4.32~h, C_{max}~of~1357~ng/mL, AUC_{0-24}~of~9091~ng/h/mL \\ ^{[1]}.$

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

REFERENCES

[1]. Toque HA, et al. Pharmacological characterization of a novel phosphodiesterase type 5 (PDE5) inhibitor lodenafil carbonate on human and rabbit corpus cavernosum. Eur J Pharmacol. 2008 Sep 4;591(1-3):189-95.

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

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