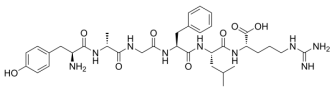
Dalargin

Cat. No.:	HY-P4053
CAS No.:	81733-79-1
Molecular Formula:	$C_{35}H_{51}N_9O_8$
Molecular Weight:	725.83
Sequence Shortening:	YAGFLR
Target:	Opioid Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Sealed storage, away from moisture Powder -80°C 2 years -20°C 1 year * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



BIOLOGICAL ACTIVITY

Description	Dalargin is a potent δ-opioid receptor agonist. Dalargin mitigates Gentamicin (HY-A0276)-induced cell death. Dalargin shows nephroprotective effects on Gentamicin-induced kidney injury. Dalargin shows antiulcer activity[1][2][3].
IC_{50} & Target	δ Opioid Receptor/DOR
In Vitro	Dalargin (100 μg/mL; 1 h) mitigates gentamicin-induced cell death of renal epithelium in vitro[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Viability Assay[2] Cell Line: Kidney cells Concentration: 100 μg/mL Incubation Time: 1 h (prior to treatment with 1.2–2.5 mg/ml gentamicin for 24 h) Result: Reduced kidney cells death.
In Vivo	Dalargin (25, 50 μg/kg; i.p.) shows nephroprotective effects on gentamicin-induced kidney injury in rats[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only. Animal Model: 290-350 g, White male rats[2] Dosage: 25, 50 μg/kg Administration: I.p. (3 h before each gentamicin injection) Result: Mitigated gentamicin-induced acutekidney injury, attenuated ROS generation and oxidative stress, alleviated histopathological changes in a renal tissue.

REFERENCES

[1]. Titov MI, et al. Dalargin--a peptidnyĭ preparat s tsitoprotektivnym deĭstviem [Dalargin--a peptide preparation with cytoprotective action]. Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR. 1985;8(2):72-6.

[2]. Plotnikov EY, et al. Nephroprotective effect of GSK-3β inhibition by lithium ions and δ-opioid receptor agonist dalargin on gentamicin-induced nephrotoxicity. Toxicol Lett. 2013 Jul 18;220(3):303-8.

[3]. Polonskiĭ VM, et al. Mesto prilozheniia (tsentral'noe ili periphericheskoe) protivoiazvennogo deĭstviia sinteticheskogo analoga éndogennykh opioidov dalargina v éksperimental'noĭ modeli tsisteaminovykh duodenal'nykh iazv u krys [The site (central or peripheral) of the anti-ulcer action of dalargin, a synthetic analog of endogenous opioids in an experimental model of cysteamine-induced duodenal ulcer in rats]. Biull Eksp Biol Med. 1987 Apr;103(4):433-4.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA