

Trypsin [9002-07-7]

#Cat: NB-64-67258-1g Size: 1g
#Cat: NB-64-67258-100mg Size: 100mg
#Cat: NB-64-67258-500mg Size: 500mg

Chemical Properties

Cas No: 9002-07-7
Formula:
Molecular weight:
Appearance: no data available
Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Trypsin is a serine protease that can be isolated from fish to hydrolyze lysine or arginine carboxy-side proteins. With the anti-inflammatory activity, Trypsin could induce the cell membrane fusion of PDCoV-infected cells through the interaction between the S glycoprotein of PDCoV and pAPN, activate PAR2 and PAR4, and promote cell proliferation and differentiation. Trypsin can be used to promote wound healing and study neurogenic inflammation.
Targets(IC₅₀)	Protease-activated Receptor
In vitro	Trypsin (10, 50 ng/mL; 12 h) enhances PDCoV cell-to-cell spread in LLC-PK cells by promoting membrane fusion in LLC-PK cells.[2] Trypsin (0.05%; 3 h) promotes C6 glioma cell proliferation in serum-free and growth factor-free medium.[3] Trypsin (20 -150 ng/mL; 5 days) potentiates PBMC differentiation.[4]
In vivo	Trypsin, when administered intradermally at doses of 100 to 500 µg per site in 50 µL of saline, elicits scratching behavior in mice.[5]

Solubility Information

Solubility	DMSO: 90.0 mg/mL, Sonication and heating to 60°C are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Reference

Bhupendra S, et al. Chapter 16 - Biomarkers of acute and chronic pancreatitis. Biomarkers in Toxicology. 2014, Pages 279-289. Yang YL, et al. Trypsin promotes porcine deltacoronavirus mediating cell-to-cell fusion in a cell type-dependent manner. Emerg Microbes Infect. 2020;9(1):457-468. Amano H, et al. Trypsin promotes C6 glioma cell proliferation in serum- and growth factor-free medium. Neurosci Res. 1996;25(3):203-208. White MJ, et al. Trypsin potentiates human fibrocyte differentiation. PLoS One. 2013;8(8):e70795. Costa R, et al. Evidence for the role of neurogenic inflammation components in trypsin-elicited scratching behaviour in mice. Br J Pharmacol. 2008;154(5):1094-110

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