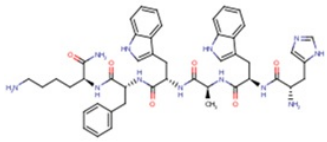
Data Sheet (Cat.No.T5806)

TargetMol
A DRUG SCREENING EXPERT

Growth hormone releasing peptide

Chemical Properties



CAS No.:	87616-84-0
Formula:	C46H56N12O6
Molecular Weight:	873
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Growth hormone releasing peptide ia a natual product ,and has anti-inflammatory effects, due to its inhibitory effect on PKC-induced activation of p38, JNK and NF-κB, possibly by targeting to MKP-1 and PP2A.
Targets(IC_{50})	PP2A: None
In vitro	Growth hormone releasing peptide-2 (GHRP-2) attenuated phorbol 12, 13-didecanoate (PDD)-induced expression of protein and mRNA, the promoter activity of COX-2 and IL-8 genes, and the secretion of prostaglandin E2 (PGE) and IL-8. GHRP-2 promoted the degradation of PDD-induced COX-2 and IL-8 proteins with the involvement of proteasomal and lysosomal pathways. PDD-mediated COX-2 production acts via the p38, c-Jun N-terminal kinase (JNK), extracellular signal-regulated kinase (ERK) and nuclear factor kappa-light-chain-enhancer of activated B cells (NF-κB) pathways; PDD-mediated IL-8 production acts via the p38, JNK and ERK pathways. GHRP-2 reduced the PDD-induced phosphorylation of p38 and JNK and activator protein 1 (AP-1) reporter activation and PDD-induced NF-κB nuclear translocation and reporter activation. The inhibitors of mitogen-activated protein kinase phosphatase-1 (MKP-1) and protein phosphatase 2 (PP2A) reduced the inhibitory effect of GHRP-2 on PDD-induced COX-2 and IL-8 expression[1].
Cell Research	KGN cells were pretreated with Growth hormone releasing peptide-2(GHRP-2)(1 M) or with GHRP-2 in combination with an inhibitor, either a MKP-1 inhibitor (sanguinarine; 0.01, 0.1, and 1 M) or a PP2A inhibitor (okadaic acid; 10, and 30 M) for 2 h before the addition of PDD for an additional 12 h. Sanguinarine at 0.1 or 1 M was able to attenuate the suppression effect of GHRP-2 on PDD-induced COX-2 expression and at 1 M, it was also able to attenuate the inhibitory effect of GHRP-2 on PDD-induced IL-8 expression[1].
Animal Research	

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.145 mL	5.727 mL	11.455 mL
5 mM	0.229 mL	1.145 mL	2.291 mL
10 mM	0.115 mL	0.573 mL	1.145 mL
50 mM	0.023 mL	0.115 mL	0.229 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Yi-Ning C , David S , Yen-Chun P , et al. Growth Hormone Releasing Peptide-2 Attenuation of Protein Kinase C-Induced Inflammation in Human Ovarian Granulosa Cells[J]. International Journal of Molecular Sciences, 2016, 17(8):1359-.

2. Martínez, Rebeca, Hernández, Liz, Gil, Lázaro, et al. Growth hormone releasing peptide-6 enhanced antibody titers against subunit antigens in mice (BALB/c), tilapia (Oreochromis niloticus) and African catfish (Clarias gariepinus)[J]. Vaccine, 2017, 35(42):5722-5728.

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