

β-CGRP, human TFA

Cat. No.:	HY-P1548A		
Molecular Formula:	C ₁₆₄ H ₂₆₈ F ₃ N ₅₁ O ₅₀ S ₃		
Molecular Weight:	3907.38		
Target:	CGRP Receptor		
Pathway:	GPCR/G Protein; Neuronal Signaling		
Storage:	Powder	-80°C	2 years
		-20°C	1 year
	In solvent	-80°C	6 months
		-20°C	1 month



Solvent & Solubility

In Vitro

H₂O : ≥ 50 mg/mL (12.80 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	0.2559 mL	1.2796 mL	2.5593 mL
	5 mM	0.0512 mL	0.2559 mL	0.5119 mL
	10 mM	0.0256 mL	0.1280 mL	0.2559 mL

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

BIOLOGICAL ACTIVITY

Description

β-CGRP, human TFA is one of calcitonin peptides, acts via the complex of calcitonin-receptor-like receptor (CRLR) and receptor-activity-modifying protein (RAMP), with IC₅₀s of 1 nM and 300 nM for CRLR/RAMP1 and CRLR/RAMP2 in cells^[1].

IC₅₀ & Target

IC₅₀: 1 nM (CRLR/RAMP1, cell assay), 300 nM (CRLR/RAMP2, cell assay)^[1]

In Vitro

β-CGRP, human is one of calcitonin peptides, acts via complex of calcitonin-receptor-like receptor (CRLR) and receptor-activity-modifying protein (RAMP), with IC₅₀s of 1 nM in both SK-N-MC and Swiss 3T3 cells express CRLR and RAMP1, and 130 nM and 300 nM in NG108-15 and HEK293T cells expressing CRLR and RAMP2^[1]. CGRP is a potent vasodilator and also shows pro- and -anti-inflammatory activity^[2].

REFERENCES

[1]. McLatchie LM, et al. RAMPs regulate the transport and ligand specificity of the calcitonin-receptor-like receptor. *Nature*. 1998 May 28;393(6683):333-9.

[2]. Russell FA, et al. Calcitonin gene-related peptide: physiology and pathophysiology. *Physiol Rev*. 2014 Oct;94(4):1099-142.

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

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