

[Leu31,Pro34]-Neuropeptide Y(human, rat) TFA

Cat. No.:	HY-P1323A
Molecular Formula:	C ₁₉₁ H ₂₈₅ F ₃ N ₅₄ O ₅₈ S
Molecular Weight:	4354.76
Sequence:	Tyr-Pro-Ser-Lys-Pro-Asp-Asn-Pro-Gly-Glu-Asp-Ala-Pro-Ala-Glu-Asp-Met-Ala-Arg-Tyr-Tyr- r-Ser-Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu-Leu-Thr-Arg-Pro-Arg-Tyr-NH ₂ <small>YPSKPDNPGEDAPAEDMARYSALRHYINLLTRPRY-NH₂ (TFA salt)</small>
Sequence Shortening:	YPSKPDNPGEDAPAEDMARYSALRHYINLLTRPRY-NH ₂
Target:	Neuropeptide Y 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)

SOLVENT & SOLUBILITY

In Vitro	H ₂ O : 50 mg/mL (11.48 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
		Concentration				
		1 mM		0.2296 mL	1.1482 mL	2.2963 mL
		5 mM		0.0459 mL	0.2296 mL	0.4593 mL
	10 mM		0.0230 mL	0.1148 mL	0.2296 mL	
Please refer to the solubility information to select the appropriate solvent.						

BIOLOGICAL ACTIVITY

Description	[Leu31,Pro34]-Neuropeptide Y(human, rat) TFA is a specific neuropeptide Y ₁ receptor agonist. [Leu31,Pro34]-Neuropeptide Y(human, rat) TFA also activates Y ₄ , Y ₅ . [Leu31,Pro34]-Neuropeptide Y(human, rat) TFA can increase blood pressure in anesthetized rats and increases food intake ^{[1][2]} .		
IC₅₀ & Target	NPY ₁ receptor	NPY ₄ receptor	NPY ₅ receptor
In Vitro	[Leu31,Pro34]-Neuropeptide Y(human, rat) TFA has K _i values of 0.39 nM, 0.499 nM, 0.31 nM for Y ₁ , Y ₄ , Y ₅ in HEK cell lines. [Leu31,Pro34]-Neuropeptide Y(human, rat) TFA has a K _i of >1000 for Y ₂ in HEK cell lines ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.		
In Vivo	[Leu31,Pro34]-Neuropeptide Y(human, rat) TFA (30 pmol; microinjected into paraventricular nucleus) increases food intake in the rats (350±400 g) ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.		

REFERENCES

- [1]. K McCrea, et al. 2-36[K4,RYYSA(19-23)]PP a novel Y₅-receptor preferring ligand with strong stimulatory effect on food intake. Regul Pept. 2000 Feb 8;87(1-3):47-58.
- [2]. J Fuhlendorff, et al. [Leu31, Pro34]neuropeptide Y: a specific Y₁ receptor agonist. Proc Natl Acad Sci U S A. 1990 Jan;87(1):182-6.
- [3]. A Kask, et al. Evidence for involvement of neuropeptide Y receptors in the regulation of food intake: studies with Y₁-selective antagonist BIBP3226. Br J Pharmacol. 1998 Aug;124(7):1507-15.
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Caution: Product has not been fully validated for medical applications. For research use only.

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