

## (Leu31,Pro34)-Peptide YY (human)

<b>Cat. No.:</b>	HY-P3877
<b>CAS No.:</b>	179986-95-9
<b>Molecular Formula:</b>	C <sub>195</sub> H <sub>296</sub> N <sub>54</sub> O <sub>56</sub>
<b>Molecular Weight:</b>	4292.75
<b>Sequence:</b>	Tyr-Pro-Ile-Lys-Pro-Glu-Ala-Pro-Gly-Glu-Asp-Ala-Ser-Pro-Glu-Glu-Leu-Asn-Arg-Tyr-Tyr -Ala-Ser-Leu-Arg-His-Tyr-Leu-Asn-Leu-Leu-Thr-Arg-Pro-Arg-Tyr-NH <sub>2</sub>
<b>Sequence Shortening:</b>	YPIKPEAPGEDASPEELNRYASLRHYLNLTRPRY-NH <sub>2</sub>
<b>Target:</b>	Neuropeptide Y Receptor
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.

### BIOLOGICAL ACTIVITY

<b>Description</b>	(Leu31,Pro34)-Peptide YY (human) is a Peptide YY (HY-P1514) derivative and is a potent and selective Y <sub>1</sub> agonist with a K <sub>D</sub> of 1.0 nM <sup>[1]</sup> .	
<b>IC<sub>50</sub> &amp; Target</b>	NPY Y <sub>1</sub> receptor 1.0 nM (Kd)	NPY Y <sub>2</sub> receptor 670 nM (Kd)
<b>In Vitro</b>	(Leu31,Pro34)-Peptide YY demonstrates high (nM) affinity in rat frontoparietal cortical membrane preparations (Y <sub>1</sub> -enriched tissue) and the rabbit saphenous vein (Y <sub>1</sub> in vitro bioassay) but only low affinity in a Y <sub>2</sub> -enriched preparation (rat hippocampus) <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
<b>In Vivo</b>	(Leu31,Pro34)-Peptide YY (0.1-1 nmol/day; ICV; 14 days) displays anxiolytic and antidepressant effect in rats <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	<b>Animal Model:</b>	Male Sprague Dawley rats weighing 150-170 g, OBX/Sham model <sup>[2]</sup>
	<b>Dosage:</b>	0.1, 0.3 and 1 nmol/day
	<b>Administration:</b>	ICV, for 14 days
	<b>Result:</b>	Significantly decreased hyperlocomotion and immobility time in OBX animals. Reversed the deficit in social contacts in OBX animals. Reduced grooming behavior in sham animals.

### REFERENCES

[1]. Dumont Y, et al. Peptide YY derivatives as selective neuropeptide Y/peptide YY1 and Y2 agonists devoided of activity for the Y3 receptor sub-type. Brain Res Mol Brain Res. 1994 Oct;26(1-2):320-4.

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

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