

## Data Sheet

<b>Product Name:</b>	Neuropeptide Y (29-64), amide, human (TFA)
<b>Cat. No.:</b>	CS-0059278
<b>Molecular Formula:</b>	C191H286F3N55O59S
<b>Molecular Weight:</b>	4385.70
<b>Target:</b>	Neuropeptide Y Receptor
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling
<b>Solubility:</b>	10 mM in H <sub>2</sub> O

YPSKPDNPGEDAPAEDMARYYSALRHYINLITRQRY-NH<sub>2</sub>



### BIOLOGICAL ACTIVITY:

Neuropeptide Y (29-64), amide, human (TFA) is involved in Alzheimer's disease (AD) and protects rat cortical neurons against  $\beta$ -Amyloid toxicity. **In Vitro:** It is showed that Neuropeptide Y (29-64), amide, human (TFA) is able to protect cortical neurons from A $\beta$ <sub>25-35</sub> toxicity. 2  $\mu$ M NPY abolishes the toxic effects of A $\beta$ <sub>25-35</sub> at 24 and 48 h. The same effect on neuronal survival is observed in neurons exposed to 1  $\mu$ M and 0.5  $\mu$ M Neuropeptide Y (29-64), amide, human (TFA) pretreatments. Pretreatment with Neuropeptide Y (29-64), amide, human (TFA) Increases NGF Synthesis, reduces NGF mRNA, and restores NGF release in cortical neurons exposed to A $\beta$ <sub>35-25</sub><sup>[1]</sup>.

### PROTOCOL (Extracted from published papers and Only for reference)

**Cell Assay:** <sup>[1]</sup>Primary cortical neurons are preincubated either alone (positive control) or with three concentrations of **Neuropeptide Y (29-64), amide, human (TFA) (NPY) (0.5, 1, and 2  $\mu$ M)** for 24 h and then exposed to A $\beta$ <sub>25-35</sub> (50  $\mu$ M) or A $\beta$ <sub>35-25</sub> (50  $\mu$ M) for 48 h<sup>[1]</sup>.

### References:

[1]. Croce N, et al. Neuropeptide Y protects rat cortical neurons against  $\beta$ -amyloid toxicity and re-establishes synthesis and release of nerve growth factor. ACS Chem Neurosci. 2012 Apr 18;3(4):312-8.

### CAIndexNames:

Neuropeptide Y (29-64), amide, human (TFA)

### SMILES:

FC(C(O)=O)(F)F.[YPSKPDNPGEDAPAEDMARYYSALRHYINLITRQRY-NH<sub>2</sub>]

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

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