

Data Sheet (Cat.No.TP2215)

Agouti-related Protein (AGRP) (25-82), human

Chemical Properties

CAS No.:	TP2215
Formula:	C279H468N80O90S1
Molecular Weight:	6415.39
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).

Biological Description

Description	Agouti-related peptide (AgRP) is a neuropeptide produced in the brain by the AgRP/NPY neuron. It is only synthesized in NPY containing cell bodies located in the ventromedial part of the arcuate nucleus in the hypothalamus. The appetite-stimulating effects of AgRP are inhibited by the hormone leptin and activated by the hormone ghrelin. Adipocytes secrete leptin in response to food intake. This hormone acts in the arcuate nucleus and inhibits the AgRP/NPY neuron from releasing orexigenic peptides.
In vitro	Ghrelin has receptors on NPY/AgRP neurons that stimulate the secretion of NPY and AgRP to increase appetite. AgRP is stored in intracellular secretory granules and is secreted via a regulated pathway. The transcriptional and secretory action of AgRP is regulated by inflammatory signals. Levels of AgRP are increased during periods of fasting. It has been found that AgRP stimulates the hypothalamic-pituitary-adrenocortical axis to release ACTH, cortisol, and prolactin. It also enhances the ACTH response to IL-1-beta, suggesting it may play a role in the modulation of the neuroendocrine response to inflammation [3].

Solubility Information

Solubility	H2O: ≥100mg/mL (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.156 mL	0.779 mL	1.559 mL
5 mM	0.031 mL	0.156 mL	0.312 mL
10 mM	0.016 mL	0.078 mL	0.156 mL
50 mM	0.003 mL	0.016 mL	0.031 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 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Inhibitors · Natural Compounds · Compound Libraries

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