Product Data Sheet

Product Name: Amyloid Precursor C-Terminal Peptide
Cat. No.: GP10046

Chemical Properties

Cas. No.			
Formula	$C_{86}H_{118}N_{20}O_{27}S_1$	M.Wt	1896.04
Solubility	≥ 189.6mg/mL in DMSO	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			

Background

Amyloid precursor c-terminal peptide (APP) (C86H118N20O27S) has the amino acid sequence Gly-Tyr-Glu-Asn-Pro-Thr-Tyr-Lys-Phe-Phe-Glu-Gln-Met-Gln-Asn. Although it has been implicated as a regulator of synapse formation, neural plasticity and iron export, the primary function of APP is not known. APP is best known as the precursor molecule whose proteolysis generates beta amyloid (A‡), a 37 to 49 amino acid peptide whose amyloid fibrillar form is the primary component of amyloid plaques found in the brains of Alzheimer's disease patients. So it is a possible contributor to Alzheimer¤s pathogenesis through MAPKs- and NF-NJB-dependent astrocytosis. Recently, APP origin was demonstrated with arthritogenic animals. Also, it induces secondary inflammation, which may cause local damage.

References:
1. Priller C, Bauer T, Mitteregger G, Krebs B, Kretzschmar HA, Herms J (July 2006). "Synapse formation and function is modulated by the amyloid precursor protein". J. Neurosci. 26 (27): 7212-21.
2. Turner PR, O'Connor K, Tate WP, Abraham WC (May 2003). "Roles of amyloid precursor protein and its fragments in regulating neural activity, plasticity and memory". Prog. Neurobiol. 70 (1): 1-32.

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3. Duce JA et al (2010). "Iron-Export Ferroxidase Activity of ǂ- Amyloid Precursor Protein Is Inhibited by Zinc in Alzheimer's Disease". Cell 142 (6): 857-67.
4. Subramanian S (January 2010). "Immunological and Biochemical factors in amyloidosis of adjuvant arthritic rats". Asian Journal of Experimental Biological Sciences 24 (1): 101-105.

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