BMA BIOMEDICALS

Peninsula Laboratories

T-4283

Rabbit anti Dynorphin A (1-10) amide

Dynorphins are a class of opioid peptides. As their precursor Proenkephalin-B is cleaved during processing, its residues 207-223 (Dynorphin A) and 226-238 (Rimorphin, Dynorphin B) are released, among others. Dynorphin A (1-13) is conserved among various species. Dynorphin A (1-10) is an endogenous opioid neuropeptide that binds in the transmembrane domain of the κ-receptor.

Dynorphins contain a high proportion of basic and hydrophobic residues. They are widely distributed in the central nervous system, with highest concentrations in the hypothalamus, medulla, pons, midbrain, and spinal cord, where they are also produced. Dynorphins are stored in large dense-core vesicles characteristic of opioid peptides storage.

Dynorphins exert their effects primarily through the κ-opioid receptor (KOR), a G-protein-coupled receptor. They are part of the complex molecular changes in the brain leading to cocaine addiction. Dynorphins are important in maintaining homeostasis through appetite control, circadian rhythms and the regulation of body temperature. However, Dynorphin derivatives are generally considered to be of little clinical use because of their very short duration of action.

This antibody was generated by immunization of rabbits with Dynorphin A (1-10) coupled to a carrier protein.

TECHNICAL AND ANALYTICAL CHARACTERISTICS

Lot number:	A03397
Host species:	Rabbit IgG
Quantity:	400µg
Format:	Protein A affinity purified from antiserum, lyophilized, packaged under nitrogen. Reconstitute by adding 0.2ml distilled water. This stock solution contains 2mg/ml IgG, phosphate buffer saline pH 7.4 (PBS), and 0.02% (w/v) Thimerosal as a preservative.
Stability:	Original vial: at least one year at 4º - 8ºC from date of delivery. Minimize repeated thawing and freezing of the antiserum by freezing aliquots at -20ºC or below.
Applications:	This antibody has been tested and validated in ELISA against Dynorphin A (1-10). Other applications like immunohistochemistry (IHC), FACS or Western Blot may work as well. Optimal dilutions should be determined by the end user. Please see **www.bma.ch** for protocols and general information.
Immunogen:	Synthetic peptide H-Tyr-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-NH2 coupled to carrier protein.

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Cross-Reactivity:

Peptide:	%:
Dynorphin A (1-10) amide	100
Dynorphin A	<0.01
Dynorphin A (1-13)	0
Dynorphin A (1-12)	0
Dynorphin A (1-11)	<0.01
Dynorphin A (1-10)	0.02
Dynorphin A (1-9)	0
Dynorphin A (1-8)	0
Dynorphin A (1-7)	0
Dynorphin A (1-6)	0
Leu-Enkephalin	0

Related Products:
S-1536: ELISA, high sensitivity for extracted samples
T-4278: anti Dynorphin A (1-13), diluted antiserum
T-4279: anti Dynorphin A (1-13), purified rabbit IgG
T-4280: anti Dynorphin A (1-13), neat antiserum
T-4875: anti Dynorphin A (3-14), neat antiserum
T-4283: anti Dynorphin A (1-10), purified rabbit IgG

This product contains Thimerosal as a preservative and is intended for laboratory use and research purposes only. Purchase of this product does not include authorization to use it in diagnostic or therapeutic applications.

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