



## T-4278

## Rabbit anti Dynorphin A (1-13)

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.

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  $\kappa$ -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 (1-13) coupled to a carrier protein.

## **TECHNICAL AND ANALYTICAL CHARACTERISTICS**

Lot number: A009303-5
Host species: Rabbit IgG

Quantity: 50ml

**Format:** This polyclonal antibody is supplied as a lyophilized powder. The powder

should be rehydrated with 50ml of RIA buffer. Upon reconstitution to 50ml total volume, the solution contains 0.1M sodium phosphate buffer (pH 7.4), 0.05M NaCl, 0.1% BSA, 0.01% NaN<sub>3</sub>, and 0.1% Triton X-100. Store at 4° - 8°C. This should ensure antibody stability for approximately

one month.

**Stability:** Original vial: at least one year at 4° - 8°C from date of delivery. Minimize

repeated thawing and freezing of the antiserum by freezing aliquots at

-20°C or below.

**Applications:** This antibody has been tested and validated in ELISA against Dynorphin

A (1-13). 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-Lys-Leu-

Lys-OH coupled to carrier protein.

## **Cross-Reactivity:**

PEPTIDE	%
Dynorphin A (1-13)	100
Dynorphin A (1-17)	100
Dynorphin A (1-12)	100
Prodynorphin (1-24)	100
Prodynorphin (209-240) (porcine)	25
Dynorphin A (1-10) Amide	1.5
Dynorphin A (1-11)	1.5
Dynorphin A (1-6)	0
Dynorphin A (1-7)	0
Dynorphin A (1-8)	0
Dynorphin A (1-9)	0

Related Products: S-1534: ELISA, high sensitivity for extracted samples

T-4279: anti Dynorphin A (1-13), purified rabbit IgG T-4280: anti Dynorphin A (1-13), neat antiserum

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.

T-4278 diluted antiserum 26.11.2020