



RayBiotech, Inc.

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Certificate of Analysis and Data Sheet

Rabbit Anti-Human Beta-Endorphin Antibody

Catalog No: 130-10077	Isotype: Rabbit IgG	Species: Human	Accession No: P01189
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Description

β -endorphin is a peptide, 31 amino acids long, resulting from processing of the precursor proopiomelanocortin (POMC). (Note, POMC also gives rise to other peptide hormones, including ACTH (Adrenocorticotrophic hormone), as well α - and γ -MSH (Melanocyte-Stimulating Hormone), resulting from intracellular processing by internal enzymes known as prohormone convertases.) β -endorphin is found in neurons of the hypothalamus, as well as the pituitary gland. It is an agonist of the opioid receptors, with evidence suggesting it serves as the endogenous ligand of the μ -opioid receptor, the same receptor to which the chemicals extracted from opium, such as morphine, have their analgesic and addictive effects (indeed, the μ -opioid receptor was named based on its most renowned ligand, morphine).

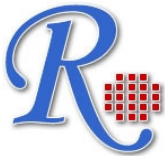
Applications

Summary of antibody applications and working conditions

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA	*			1 : 160,000
Western Blotting			*	
Enzyme Immunoassay (EIA)			*	
Immunohistology - paraffin			*	
Immunohistology - resin			*	
Immunoprecipitation			*	
Flow Cytometry			*	
Neutralization			*	

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application

The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.



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Preparation

Immunogen was synthetic peptide derived from human Beta-Endorphin. This antibody was produced from a rabbit immunized with the immunogen. The IgG fraction was purified from rabbit serum followed by Protein A/G affinity chromatography.

Specificity

The antibody can specifically bind to human Beta-Endorphin. Cross reactivity with mouse or rat Endorphin-B was not tested.

Reconstitution

Product is supplied as a powder obtained from lyophilization of purified antibody in PBS without preservatives. Reconstitute the antibody with sterile 1 x PBS to a final concentration of 1 mg/ml.

Storage

Store at 4°C if intended for use within one month, otherwise, store at -20°C to -80°C. The lyophilized antibody is stable for at least 18 months after the date of receipt when stored at -20°C to -80°C. After reconstitution, it can also be aliquoted and stored frozen at -20°C to -80°C in a manual defrost freezer for at least 6 months without detectable loss of activity. Upon reconstitution, the antibody can also be stored for 30 days at 4°C. **Please avoid freeze-thaw cycles, as this will lower the activity of the antibody.**

Reference

1. Batistaki C, et al.. (2008) Effect of exogenous catecholamines on tumor necrosis factor alpha, interleukin-6, interleukin-10 and beta-endorphin levels following severe trauma. *Vascul Pharmacol.* 48(2-3):85-91.
2. Nicolas P and Li CH. (1985) Beta-endorphin-(1-27) is a naturally occurring antagonist to morphine-induced analgesia. *Proc Natl Acad Sci U S A.* 82(10):3178-81.

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