

**Antibody to Beta-Endorphin**  
RABBIT POLYCLONAL

**Catalog Number:** AB-10  
**Quantity:** 100 microliters  
**Format:** Liquid antisera, no preservative  
**Host:** Rabbit  
**Immunogen:** Synthetic beta-endorphin

**Background:**

Beta-endorphin, a potent analgesic opioid peptide is derived from the precursor hormone 'proopiomelanocortin,' and is localized mainly in brain regions such as the hypothalamus, brain stem, and pituitary gland. Beta-endorphin is an endogenous peptide which functions as a selective agonist for the mu-opioid receptors. These small-chain peptides produce feelings of well-being, tolerance to pain, etc. These compounds are hundreds or even thousands of times more potent than morphine on a molar basis. Because of this potency, their concentrations *in vivo* are low.

**Specificity and Preparation:**

This antibody recognizes mammalian beta-endorphin. Synthetic beta-endorphin was used as immunogen. The antibody is routinely tested by dot blot. If used in western blot, this antibody may recognize the parent molecules of beta-endorphin. See cited references for details.

**Usage and Storage:**

Applications include immunoblotting (1:5,000)<sup>2</sup> and radioimmunoassay (1:28,000).<sup>1,2</sup> Store the antibody at 4° C for one month or -20°C in undiluted aliquots for one year. Avoid repeated freezing and thawing. Gently spin down material before use; 5-10 seconds in a microfuge should be adequate.

**References:**

1. Baird A, Wehrenberg WB, Shibasaki T, Benoit R, Chong-Li Z, Esch F, Ling N. (1982) Ovine corticotropin-releasing factor stimulates the concomitant secretion of corticotropin, beta-lipotropin, beta-endorphin and gamma-melanotropin by the bovine adenohipophysis *in vitro*. *Biochem Biophys Res Commun* 108(3):959-964.
2. Guillemin R, Ling N, and Vargo T. (1977) Radioimmunoassays for  $\alpha$ -endorphin and  $\beta$ -endorphin. *Biochem Biophys Res Commun* 77(1):361-366.

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