Advanced Targeting Systems

1930 KELLOGG AVENUE
CARLSBAD, CA 92008 USA
01.858.642.1988 • WWW.ATSBIO.COM

# 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 & 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:** Applications include immunoblotting (1:5,000)[2] and radioimmunoassay (1:28,000).[1,2]

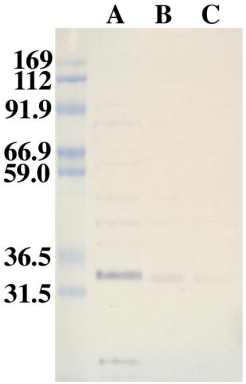
**Storage:** Store the antibody at 4°C for one month or -20°C in undiluted aliquots for one year. Avoid repeated freezing and thawing. Gently spin down material 5-10 seconds in a microfuge before use.

*Scan to view all product references.*

**Selected 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 adenohypophysis *in vitro*. *Biochem Biophys Res Commun* 108(3):959-964.
2. Guillemin R, Ling N, and Vargo T. (1977) Radioimmunoassays for α-endorphin and β-endorphin. *Biochem Biophys Res Commun* 77(1):361-366.

*To view protocol(s) for this and other products please visit: www.ATSbio.com/library/protocols*




This figure shows western blotting of rat brain extract with Cat. #AB-10. The 31+ kDa band is pro-opiomelenocortin. The lower band may be the digestion product beta-lipotropin. Antibody is at 1:1000, as is second antibody, A corresponds to 44 micrograms rat brain extract, B is 11 micrograms, C is 4.4 micrograms.