

Datasheet: AHP377

Description:	RABBIT ANTI DYNORPHIN B (aa1-13)
Specificity:	DYNORPHIN B (aa1-13)
Format:	Serum
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	0.1 ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen	▪			1/250 - 1/2500
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Radioimmunoassays	▪			1/5000

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

Target Species

Pig

Species Cross Reactivity

Reacts with: Rhesus Monkey, Hamster, Rat, Guinea Pig, Mouse
Based on sequence similarity, is expected to react with: Bovine, Chimpanzee, Dog, Gorilla, Horse, Human, Mouse
N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Serum - liquid

Antiserum Preparation Antisera to Dynorphin B (1-13) were raised by repeated immunisation of rabbits with highly purified antigen.

Preservative Stabilisers	<0.1% Sodium Azide (NaN ₃)
Immunogen	Synthetic peptide, YGGFLRRQFKVVT, corresponding to full-length porcine dynorphin B (1-13), conjugated to thyroglobulin.
External Database Links	<p>UniProt: P01214 Related reagents</p> <p>Entrez Gene: 445529 PDYN Related reagents</p>
RRID	AB_322029
Specificity	<p>Rabbit anti Dynorphin B antibody recognizes dynorphin B, an endogenous opioid peptide, also known as rimorphin with the peptide sequence Tyr-Gly-Gly-Phe-Leu-Arg-Arg-Gln-Phe-Lys-Val-Val-Thr, (YGGFLRRQFKVVT) derived from the sequential cleavage of pro-enkephalin B to form leumorphin which is, in turn cleaved to form dynorphin B (Devi et al. 1985). The cleavage of the dynorphin precursors to form the dynorphin neuropeptides is largely controlled by the serine protease cathepsin L which co-localizes with dynorphins in secretory vesicles of brain cortical neurons (Funkelstein et al. 2010) and prohormone convertase 2, a member of the furin, peptidase S8 family (Schwarzer 2009).</p> <p>Dynorphin b sequence is well conserved among mammal, avian (Youngren et al. 1993) and reptilian (Goldsmith et al. 1992) species. Rabbit anti Dynorphin b antibody is expected to have a wide species cross reactivity.</p>
References	<ol style="list-style-type: none"> 1. Khachaturian, H. <i>et al.</i> (1985) Prodynorphin peptide immunocytochemistry in rhesus monkey brain. Peptides. 6 Suppl 2: 155-66. 2. Sherman, T.G. <i>et al.</i> (1988) Regulation of hypothalamic magnocellular neuropeptides and their mRNAs in the Brattleboro rat: coordinate responses to further osmotic challenge. J Neurosci. 8 (10): 3785-96. 3. Neal, C.R. Jr. & Newman, S.W. (1989) Prodynorphin peptide distribution in the forebrain of the Syrian hamster and rat: a comparative study with antisera against dynorphin A, dynorphin B, and the C-terminus of the prodynorphin precursor molecule. J Comp Neurol. 288 (3): 353-86. 4. Zhang, L. <i>et al.</i> (2004) Cocaine-induced intracellular signaling and gene expression are oppositely regulated by the dopamine D1 and D3 receptors. J Neurosci. 24: 3344-54. 5. Darmopil, S. <i>et al.</i> (2008) Tyrosine hydroxylase cells appearing in the mouse striatum after dopamine denervation are likely to be projection neurones regulated by L-DOPA. Eur J Neurosci. 27 (3): 580-92. 6. Darmopil, S. <i>et al.</i> (2009) Genetic inactivation of dopamine D1 but not D2 receptors inhibits L-DOPA-induced dyskinesia and histone activation. Biol Psychiatry. 66: 603-13. 7. Ruiz-DeDiego, I. <i>et al.</i> (2015) Activation of DREAM (downstream regulatory element antagonistic modulator), a calcium-binding protein, reduces L-DOPA-induced dyskinesias in mice. Biol Psychiatry. 77 (2): 95-105.

8. Hernández, L.F. *et al.* (2017) Striatal activation by optogenetics induces dyskinesias in the 6-hydroxydopamine rat model of Parkinson disease. [Mov Disord. 32 \(4\): 530-7.](#)
9. Agostinho, A.S. *et al.* (2019) Dynorphin-based "release on demand" gene therapy for drug-resistant temporal lobe epilepsy. [EMBO Mol Med. 11 \(10\): e9963.](#)
10. Solís, O. *et al.* (2021) Behavioral sensitization and cellular responses to psychostimulants are reduced in D2R knockout mice. [Addict Biol. 26 \(1\): e12840.](#)

Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C. Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #20362 available at: https://www.bio-rad-antibodies.com/SDS/AHP377 20362
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)
 Sheep Anti Rabbit IgG (STAR35...) [RPE](#)
 Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)
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