

## Datasheet: AHP377

**BATCH NUMBER 152173**

<b>Description:</b>	RABBIT ANTI DYNORPHIN B (aa1-13)
<b>Specificity:</b>	DYNORPHIN B (aa1-13)
<b>Format:</b>	Serum
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	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](http://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.

<b>Target Species</b>	Pig
<b>Species Cross Reactivity</b>	<p>Reacts with: Rhesus Monkey, Hamster, Rat, Guinea Pig, Mouse</p> <p>Based on sequence similarity, is expected to react with: Bovine, Chimpanzee, Dog, Gorilla, Horse, Human, Mouse</p> <p><b>N.B.</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.</p>
<b>Product Form</b>	Serum - liquid

**Antiserum Preparation** Antisera to Dynorphin B (1-13) were raised by repeated immunisation of rabbits with

highly purified antigen.

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**Preservative  
Stabilisers**

0.09% Sodium Azide (NaN<sub>3</sub>)

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**Immunogen**

Synthetic peptide, YGGFLRRQFKVVT, corresponding to full-length porcine dynorphin B (1-13), conjugated to thyroglobulin.

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**External Database  
Links**

**UniProt:**

[P01214](#)

[Related reagents](#)

**Entrez Gene:**

[445529](#)

PDYN

[Related reagents](#)

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**RRID**

AB\_322029

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**Specificity**

**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, 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](#)).

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.

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**References**

1. Khachaturian, H. *et al.* (1985) Prodynorphin peptide immunocytochemistry in rhesus monkey brain. [Peptides. 6 Suppl 2: 155-66.](#)
2. Sherman, T.G. *et al.* (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. NealCr, J.r. & 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. *et al.* (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. *et al.* (2009) Genetic inactivation of dopamine D1 but not D2 receptors inhibits L-DOPA-induced dyskinesia and histone activation. [Biol Psychiatry. 66: 603-13.](#)
6. Ruiz-DeDiego, I. *et al.* (2014) Activation of DREAM (Downstream Regulatory Element Antagonistic Modulator), a Calcium-Binding Protein, Reduces L-DOPA-Induced Dyskinesias in Mice. [Biol Psychiatry. pii: S0006-3223\(14\)00224-8.](#)
7. Solís, O. *et al.* (2021) Behavioral sensitization and cellular responses to psychostimulants are reduced in D2R knockout mice. [Addict Biol. 26 \(1\): e12840.](#)

**Storage** Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #20362 available at:  
<https://www.bio-rad-antibodies.com/SDS/AHP377>  
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**Regulatory** For research purposes only

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## 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)  
'M364196:200529'

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