


Product datasheet

Anti-Dynorphin A antibody ab82509

★★★★★ [3 Abreviews](#) [3 References](#) [5 Images](#)

Overview

Product name	Anti-Dynorphin A antibody
Description	Rabbit polyclonal to Dynorphin A
Host species	Rabbit
Specificity	Replenishment batches of ab82509 are tested in IHC-P. Previous batches were additionally validated in ICC/IF and WB. These applications are still expected to work and are covered by our Abpromise guarantee.
Tested applications	Suitable for: ICC/IF, IHC-P, WB
Species reactivity	Reacts with: Mouse, Rat, Human Predicted to work with: Guinea pig, Cow, Pig, Monkey 
Immunogen	Synthetic peptide corresponding to Human Dynorphin A aa 200 to the C-terminus conjugated to keyhole limpet haemocyanin. (Peptide available as ab91634)
Positive control	This antibody gave a positive signal in human brain membrane tissue lysate. IHC-P: FFPE mouse dorsal root ganglion.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab82509 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

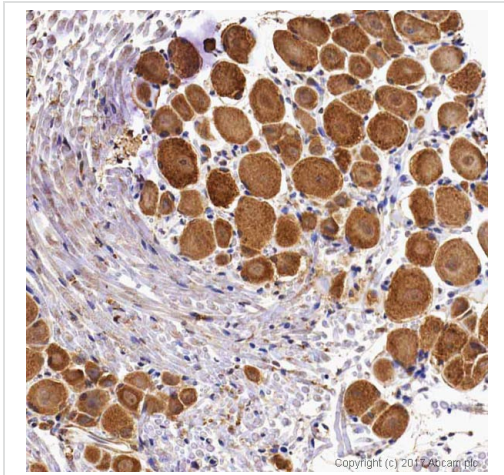
Application	Abreviews	Notes
ICC/IF		Use a concentration of 5 µg/ml.
IHC-P	★★★★★ (2)	Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
WB	★★★★☆ (1)	Use a concentration of 1 µg/ml. Detects a band of approximately 28 kDa (predicted molecular weight: 28 kDa).

Target

Relevance Dynorphins are a class of peptides produced by many different populations of neurons, which has some opiate like activity. It is thus classed as an endogenous opioid peptide. The dynorphins, which include dynorphin A, dynorphin B, alpha and beta neoendorphin, and big dynorphin, are all the products of a single gene, 'preprodynorphin'. Dynorphin is produced in many different parts of the brain, including the hypothalamus, the hippocampus and the spinal cord, and has many different physiological actions, depending upon its site of production. Dynorphin is involved in modulating responses to several psychoactive substances, including cocaine. As such, it may help some individuals against addiction. Blocking dynorphin may help alleviate depression.

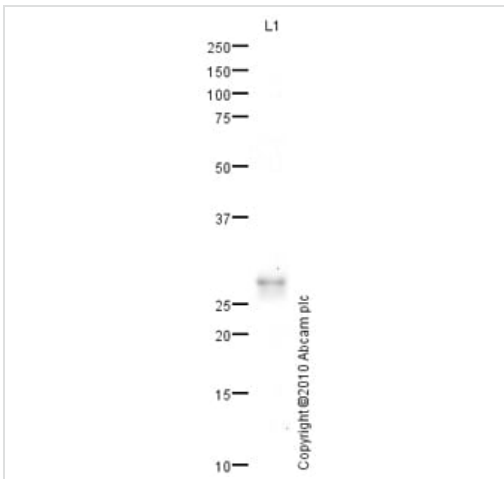
Cellular localization Secreted

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Dynorphin A antibody (ab82509)

IHC image of Dynorphin A staining in formalin fixed, paraffin embedded mouse dorsal root ganglion tissue section, performed on a Leica Bond™ system using the standard protocol B. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab82509, 10µg/ml, for 15 mins at room temperature. A goat anti-rabbit biotinylated secondary antibody was used to detect the primary, and visualized using an HRP conjugated ABC system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Western blot - Anti-Dynorphin A antibody (ab82509)

Anti-Dynorphin A antibody (ab82509) at 1 µg/ml + Human brain normal tissue lysate - membrane extract ([ab29456](#)) at 10 µg

Secondary

Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

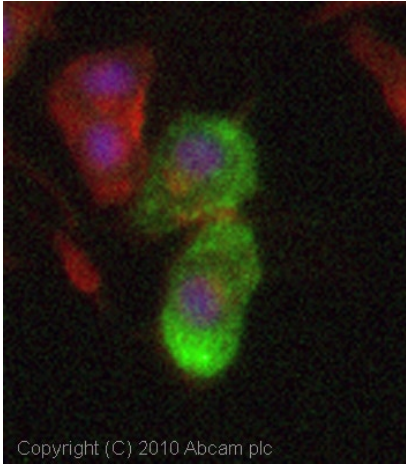
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 28 kDa

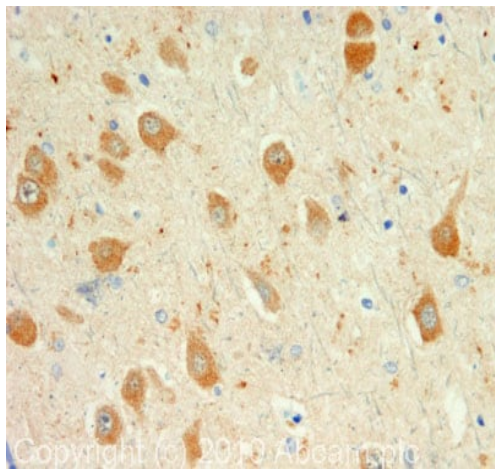
Observed band size: 28 kDa

Exposure time: 15 minutes



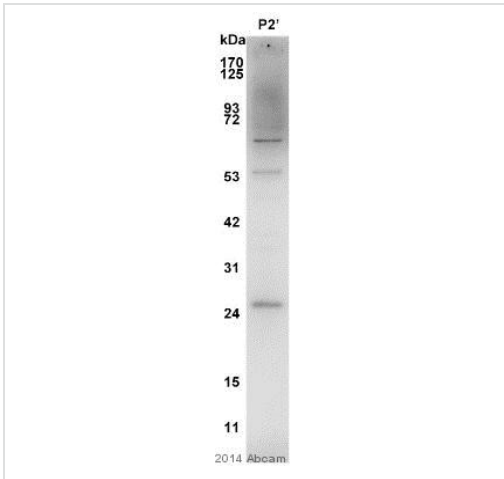
Immunocytochemistry/ Immunofluorescence - Anti-Dynorphin A antibody (ab82509)

ICC/IF image of ab82509 stained PC-12 (Rat adrenal gland pheochromocytoma) cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab82509, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM. This antibody also gave a positive result in 100% methanol fixed (5 min) PC12 cells at 5µg/ml.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Dynorphin A antibody (ab82509)

IHC image of Dynorphin A staining in human hippocampus formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab82509, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX



Western blot - Anti-Dynorphin A antibody (ab82509)

This image is courtesy of an anonymous Abreview

Anti-Dynorphin A antibody (ab82509) at 1/1000 dilution + Mouse synaptosome from hippocampal stratum lucidum tissue lysate at 10 µg

Secondary

HRP-conjugated anti-rabbit IgG polyclonal at 1/5000 dilution

Developed using the ECL technique.

Performed under non-reducing conditions.

Predicted band size: 28 kDa

Observed band size: 26 kDa

Additional bands at: 56 kDa (possible non-specific binding), 65 kDa (possible non-specific binding)

Exposure time: 15 seconds

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