

Anti-Proenkephalin-B antibody [EPR24508-78] - BSA and Azide free ab283514

Recombinant RabMAb

8 Images

Overview

| | |
|---------------------|--|
| Product name | Anti-Proenkephalin-B antibody [EPR24508-78] - BSA and Azide free |
| Description | Rabbit monoclonal [EPR24508-78] to ProDynorphin - BSA and Azide free |
| Host species | Rabbit |
| Tested applications | Suitable for: IHC-P, WB, IP, Dot blot Unsuitable for: Flow Cyt (Intra), ICC/IF or IHC-Fr |
| Species reactivity | Reacts with: Rat |
| Immunogen | Recombinant fragment. This information is proprietary to Abcam and/or its suppliers. |
| Positive control | WB: Rat pituitary tissue lysate; LIF/His-rat Prodynorphin full-length protein, His-tagged rat Prodynorphin pro-peptide. IHC-P: Rat hippocampus and pituitary tissue. IP: Rat pituitary tissue lysate. |
| General notes | <p>ab283514 is the carrier-free version of ab283501.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit</p> |

monoclonal antibodies. For details on our patents, please refer to [RabMAb® patents](#).

Properties

| | |
|----------------------|----------------------------------|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Store at +4°C. |
| Storage buffer | pH: 7.2 Constituent: 100% PBS |
| Carrier free | Yes |
| Purity | Protein A purified |
| Clonality | Monoclonal |
| Clone number | EPR24508-78 |
| Isotype | IgG |

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab283514 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 |
|-------------|-----------|---|
| IHC-P | | Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. |
| WB | | Use at an assay dependent concentration. |
| IP | | Use at an assay dependent concentration. |
| Dot blot | | Use at an assay dependent concentration. |

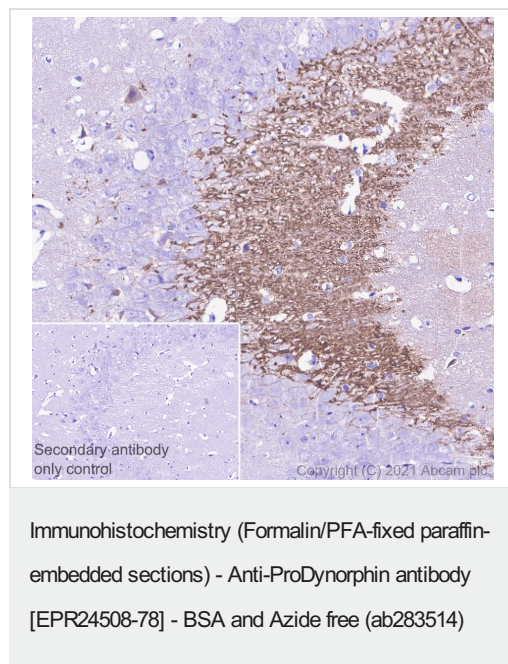
Application notes Is unsuitable for Flow Cyt (Intra), ICC/IF or IHC-Fr.

Target

| | |
|------------------------|---|
| Function | Leu-enkephalins compete with and mimic the effects of opiate drugs. They play a role in a number of physiologic functions, including pain perception and responses to stress. Dynorphin peptides differentially regulate the kappa opioid receptor. Dynorphin A(1-13) has a typical opiod activity, it is 700 times more potent than Leu-enkephalin. Leumorphin has a typical opiod activity and may have anti-apoptotic effect. |
| Involvement in disease | Defects in PDYN are the cause of spinocerebellar ataxia type 23 (SCA23) [MIM:610245]. Spinocerebellar ataxia is a clinically and genetically heterogeneous group of cerebellar disorders. Patients show progressive incoordination of gait and often poor coordination of hands, speech and eye movements, due to degeneration of the cerebellum with variable involvement of the brainstem and spinal cord. SCA23 is an adult-onset autosomal dominant form characterized by slowly progressive gait and limb ataxia, with variable additional features, including peripheral |

| | |
|---|---|
| | neuropathy and dysarthria. |
| Sequence similarities | Belongs to the opioid neuropeptide precursor family. |
| Post-translational modifications | The N-terminal domain contains 6 conserved cysteines thought to be involved in disulfide bonding and/or processing. |
| Cellular localization | Secreted. |

Images

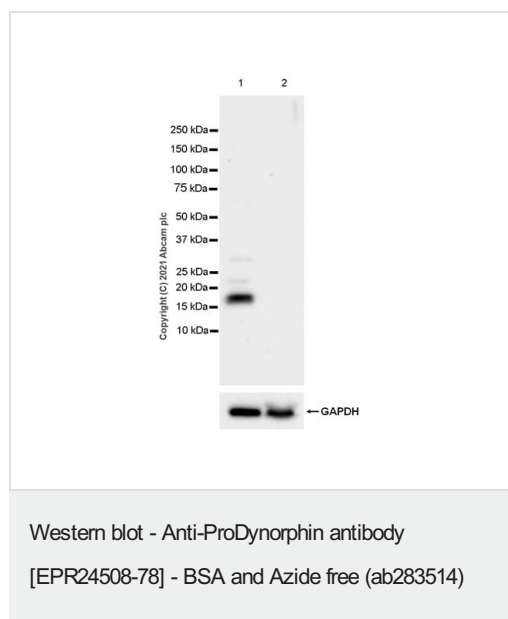


This data was developed using [ab283501](#), the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Rat hippocampus tissue labelling ProDynorphin with [ab283501](#) at 1/4000 (0.137 ug/ml) dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)). Positive staining on rat hippocampus (PMID: 16966485). The section was incubated with [ab283501](#) for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



All lanes : Anti-Proenkephalin-B antibody [EPR24508-78] ([ab283501](#)) at 1/1000 dilution

Lane 1 : Rat pituitary tissue lysate at 20 µg

Lane 2 : Rat liver tissue lysate at 40 µg

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Observed band size: 18,23,28 kDa

This data was developed using [ab283501](#), the same antibody clone in a different buffer formulation.

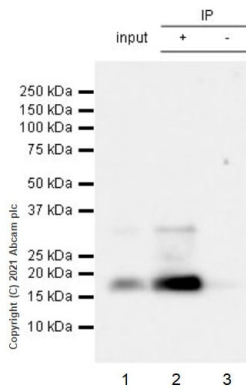
Blocking and diluting buffer and concentration: 5% NFDm/TBST.

The observed molecular weight is consistent with the literature

(PMID: 9712897).

Negative control: Rat liver (PMID:23649822).

Exposure time: 26 seconds.



Immunoprecipitation - Anti-ProDynorphin antibody [EPR24508-78] - BSA and Azide free (ab283514)

This data was developed using [ab283501](#), the same antibody clone in a different buffer formulation.

ProDynorphin was immunoprecipitated from 0.35 mg Rat pituitary tissue lysate with [ab283501](#) at 1/30 dilution (2 ug in 0.35 mg lysates). Western blot was performed on the immunoprecipitate using [ab283501](#) at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)([ab131366](#)) was used at 1/5000 dilution.

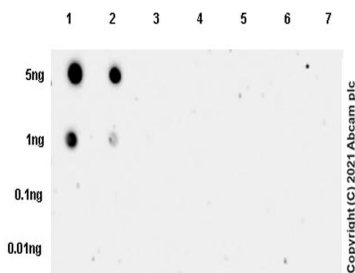
Lane 1: Rat pituitary tissue lysate 10 ug

Lane 2: [ab283501](#) IP in Rat pituitary tissue lysate

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of [ab283501](#) in rat pituitary tissue lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 10 seconds.



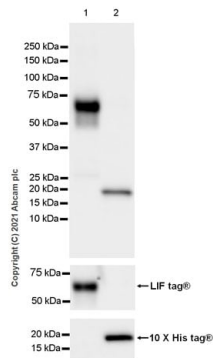
Dot Blot - Anti-ProDynorphin antibody [EPR24508-78] - BSA and Azide free (ab283514)

This data was developed using [ab283501](#), the same antibody clone in a different buffer formulation.

Dot blot analysis of ProDynorphin using [ab283501](#) at 1/1000 (0.583 ug/ml) dilution followed by a Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated ([ab97051](#)) at 1/100000 dilution.

Exposure time: 3 minutes.

Blocking and diluting buffer and concentration: 5% NFDM/TBST.



Western blot - Anti-ProDynorphin antibody
[EPR24508-78] - BSA and Azide free (ab283514)

All lanes : Anti-Proenkephalin-B antibody [EPR24508-78]
([ab283501](#)) at 1/1000 dilution

Lane 1 : LIF/His-rat ProDynorphin full-length protein

Lane 2 : His-tagged rat ProDynorphin pro-peptide

Lysates/proteins at 0.01 µg per lane.

Secondary

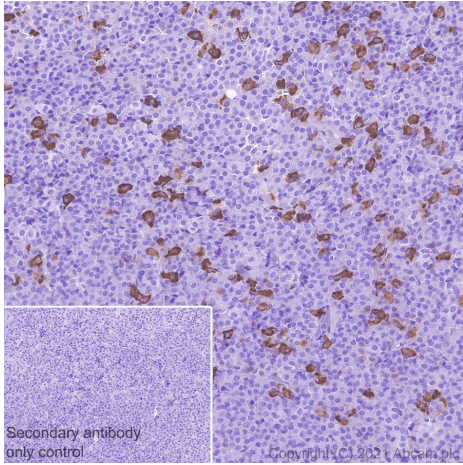
All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Observed band size: 18,64 kDa

This data was developed using [ab283501](#), the same antibody clone in a different buffer formulation.

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Exposure time: 1 second.



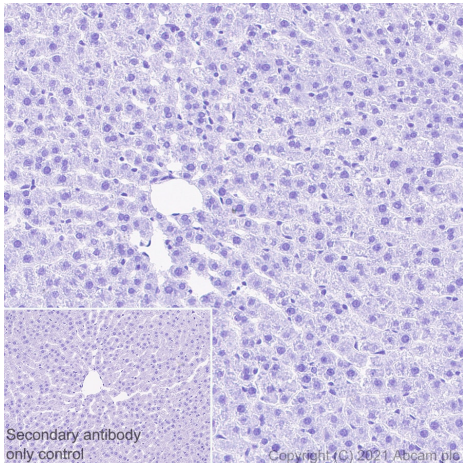
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ProDynorphin antibody [EPR24508-78] - BSA and Azide free (ab283514)

This data was developed using [ab283501](#), the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Rat pituitary tissue labelling ProDynorphin with [ab283501](#) at 1/4000 (0.137 ug/ml) dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)). Positive staining on rat pituitary (PMID: 16966485). The section was incubated with [ab283501](#) for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ProDynorphin antibody [EPR24508-78] - BSA and Azide free (ab283514)

This data was developed using [ab283501](#), the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Rat liver tissue labelling ProDynorphin with [ab283501](#) at 1/4000 (0.137 ug/ml) dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)). Negative control: no staining on rat liver (PMID 23649822). The section was incubated with [ab283501](#) for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-ProDynorphin antibody [EPR24508-78] - BSA
and Azide free (ab283514)

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