

Product datasheet

Anti-Delta Opioid Receptor antibody [EPR5029(2)] ab176324

Recombinant RabMAb

[8 References](#) [8 Images](#)

Overview

| | |
|----------------------------|---|
| Product name | Anti-Delta Opioid Receptor antibody [EPR5029(2)] |
| Description | Rabbit monoclonal [EPR5029(2)] to Delta Opioid Receptor |
| Host species | Rabbit |
| Tested applications | Suitable for: WB, Flow Cyt (Intra), ICC/IF Unsuitable for: IHC-P or IP |
| Species reactivity | Reacts with: Mouse, Rat, Human |
| Immunogen | Synthetic peptide within Human Delta Opioid Receptor aa 1-100 (Cysteine residue). The exact sequence is proprietary. Database link: P41143 |
| Positive control | WB: Human brain, Mouse spleen, Rat spleen, and Mouse brain lysates ICC/IF: SH-SY5Y cells. Flow Cyt: U-87 MG cells. |
| General notes | This product is a recombinant monoclonal antibody, which offers several advantages including: <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 For more information see here . Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit 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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle. |
| Storage buffer | Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA |
| Purity | Protein A purified |

| | |
|---------------------|------------|
| Clonality | Monoclonal |
| Clone number | EPR5029(2) |
| Isotype | IgG |

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab176324 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 |
|-------------------------|-----------|--|
| WB | | 1/1000 - 1/10000. Predicted molecular weight: 40 kDa. |
| Flow Cyt (Intra) | | 1/10 - 1/50. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. |
| ICC/IF | | 1/100 - 1/500. |

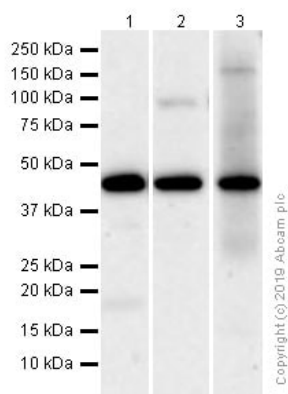
Application notes Is unsuitable for IHC-P or IP.

Target

Relevance Function: G-protein coupled receptor that functions as receptor for endogenous enkephalins and for a subset of other opioids. Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors, such as adenylate cyclase. Signaling leads to the inhibition of adenylate cyclase activity. Inhibits neurotransmitter release by reducing calcium ion currents and increasing potassium ion conductance. Plays a role in the perception of pain and in opiate-mediated analgesia. Plays a role in developing analgesic tolerance to morphine. Tissue specificity: Detected in oocytes (at protein level). Detected in brain cortex, hypothalamus, hippocampus and olfactory bulb. Detected in oocytes. Similarity: Belongs to the G-protein coupled receptor 1 family. PTM: N-glycosylated. Ubiquitinated. A basal ubiquitination seems not to be related to degradation. Ubiquitination is increased upon formation of OPRM1:OPRD1 oligomers leading to proteasomal degradation; the ubiquitination is diminished by RTP4.

Cellular localization Multi pass membrane protein

Images



Western blot - Anti-Delta Opioid Receptor antibody [EPR5029(2)] (ab176324)

All lanes : Anti-Delta Opioid Receptor antibody [EPR5029(2)] (ab176324) at 1/2000 dilution (Purified)

Lane 1 : Human brain lysates

Lane 2 : Mouse spleen lysates

Lane 3 : Rat spleen lysates

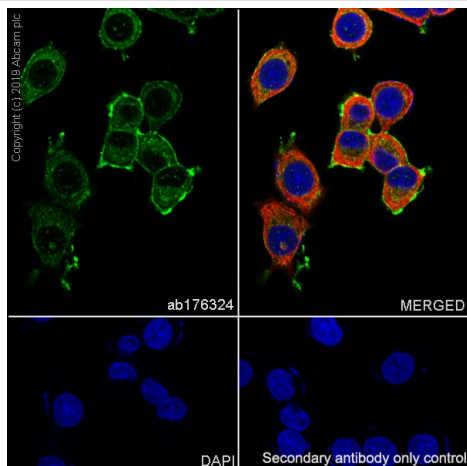
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

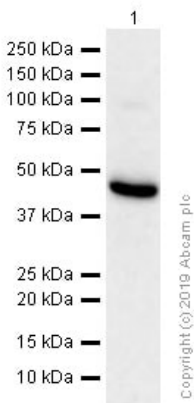
Predicted band size: 40 kDa

Observed band size: 40 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Delta Opioid Receptor antibody [EPR5029(2)] (ab176324)

Immunocytochemistry/ Immunofluorescence analysis of SH-SY5Y (Human neuroblastoma epithelial cell) cells labeling Delta Opioid Receptor with purified ab176324 at 1/100 dilution (10 µg/ml). Cells were fixed in 100% Methanol and permeabilized with None. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Western blot - Anti-Delta Opioid Receptor antibody [EPR5029(2)] (ab176324)

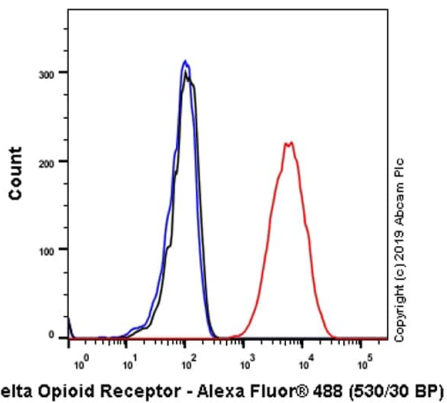
Anti-Delta Opioid Receptor antibody [EPR5029(2)] (ab176324) at 1/10000 dilution (Purified) + Mouse brain lysates at 20 µg

Secondary

Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

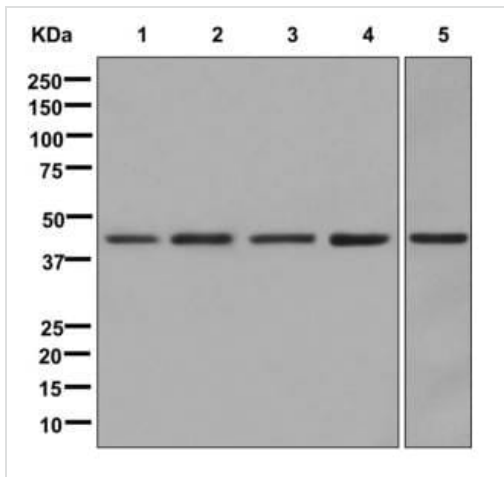
Predicted band size: 40 kDa

Observed band size: 40 kDa



Flow Cytometry (Intracellular) - Anti-Delta Opioid Receptor antibody [EPR5029(2)] (ab176324)

Flow Cytometry analysis of U-87 MG (Human glioblastoma-astrocytoma epithelial cell) cells labeling Delta Opioid Receptor with purified ab176324 at 1/150 dilution (10 µg/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Western blot - Anti-Delta Opioid Receptor antibody [EPR5029(2)] (ab176324)

All lanes : Anti-Delta Opioid Receptor antibody [EPR5029(2)] (ab176324) at 1/1000 dilution

Lane 1 : Human cerebellum lysate

Lane 2 : Human fetal brain lysate

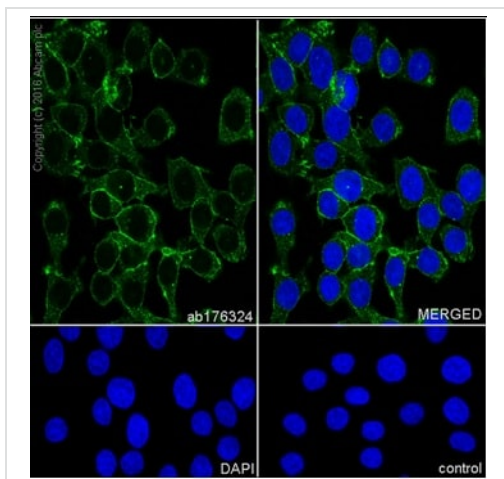
Lane 3 : U87-MG lysate

Lane 4 : HUVEC lysate

Lane 5 : SH-SY5Y lysate

Lysates/proteins at 10 µg per lane.

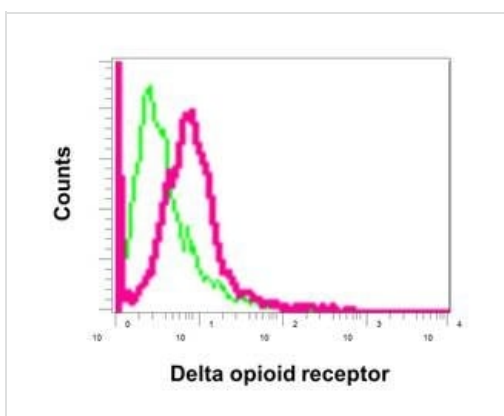
Predicted band size: 40 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Delta Opioid Receptor antibody [EPR5029(2)] (ab176324)

Immunocytochemistry/Immunofluorescence analysis of SH-SY5Y cells labelling Delta Opioid Receptor at 1/500. Cells were fixed with 100% Methanol. An **ab150077** AlexaFluor@488 Goat anti-Rabbit secondary (1/1000) was used as the secondary antibody. Nuclei counterstained with DAPI (blue).

Control: primary antibody (1/500) and secondary antibody, **ab150077** AlexaFluor@488 Goat anti-Rabbit secondary IgG (1/1000).



Flow Cytometry (Intracellular) - Anti-Delta Opioid Receptor antibody [EPR5029(2)] (ab176324)

Flow cytometric analysis of U87-MG cells labeling Delta Opioid Receptor using ab176324 at a 1/10 dilution (red) or a rabbit IgG control (green).

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-Delta Opioid Receptor antibody [EPR5029(2)]
(ab176324)

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