

Product datasheet

Anti-BDNF antibody ab223354

3 Images

Overview

Product name	Anti-BDNF antibody
Description	Rabbit polyclonal to BDNF
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, WB
Species reactivity	Reacts with: Mouse, Human
Immunogen	Synthetic peptide corresponding to Human BDNF (N terminal). Database link: P23560
Positive control	WB: HeLa and HEK-293T cell lysates; Mouse brain lysate. ICC/IF: SK-N-BE cells.
General notes	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>Please check that this product meets your needs before purchasing. 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, as well as customer reviews and Q&As.</p>

Properties

Form	Liquid
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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: 0.09% Sodium azide Constituents: 50% Glycerol (glycerin, glycerine), PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab223354** in the following tested applications.

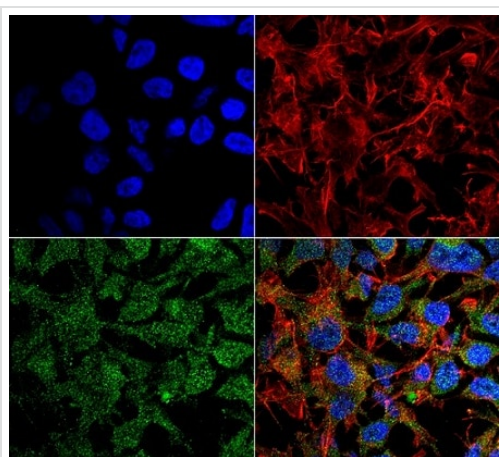
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/100.
WB		1/1000. Detects a band of approximately 27.9 kDa (predicted molecular weight: 27.9 kDa).

Target

Function	During development, promotes the survival and differentiation of selected neuronal populations of the peripheral and central nervous systems. Participates in axonal growth, pathfinding and in the modulation of dendritic growth and morphology. Major regulator of synaptic transmission and plasticity at adult synapses in many regions of the CNS. The versatility of BDNF is emphasized by its contribution to a range of adaptive neuronal responses including long-term potentiation (LTP), long-term depression (LTD), certain forms of short-term synaptic plasticity, as well as homeostatic regulation of intrinsic neuronal excitability.
Tissue specificity	Brain. Highly expressed in hippocampus, amygdala, cerebral cortex and cerebellum. Also expressed in heart, lung, skeletal muscle, testis, prostate and placenta.
Involvement in disease	Bulimia nervosa 2 Congenital central hypoventilation syndrome
Sequence similarities	Belongs to the NGF-beta family.
Post-translational modifications	The propeptide is N-glycosylated and glycosulfated. Converted into mature BDNF by plasmin (PLG).
Cellular localization	Secreted.

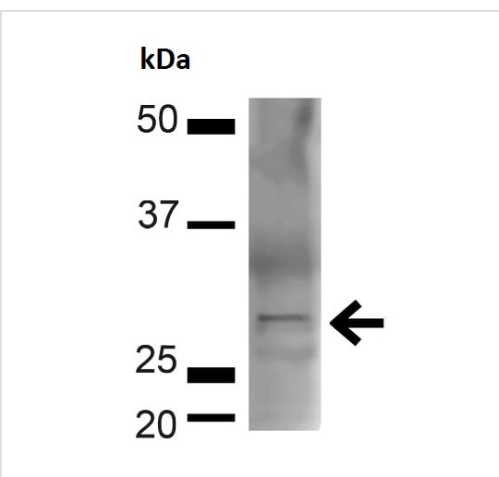
Images



Immunocytochemistry/ Immunofluorescence - Anti-BDNF antibody (ab223354)

4% formaldehyde-fixed SK-N-BE cells stained for BDNF (green) using ab223354 at 1/100 dilution in ICC/IF. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1/1000, 1/5000 for 60 min RT, 5 min RT.

(A) DAPI nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) ab223354 (D) Merge.



Western blot - Anti-BDNF antibody (ab223354)

Anti-BDNF antibody (ab223354) at 1/1000 dilution + Mouse brain lysate at 20 μ g

Secondary

Goat Anti-Rabbit IgG HRP at 1/2000 dilution

Predicted band size: 27.9 kDa

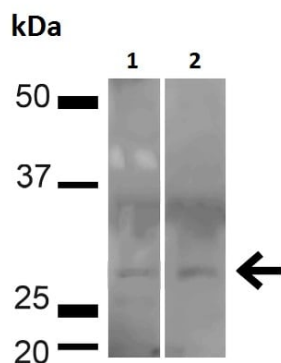
Observed band size: 27.9 kDa

Exposure time: 12 minutes

Blocking buffer: 5% milk in TBST.

Color Development: TMB solution.

Primary and secondary antibodies were incubated for 1 hour at RT.



Western blot - Anti-BDNF antibody (ab223354)

All lanes : Anti-BDNF antibody (ab223354) at 1/1000 dilution

Lane 1 : HeLa (human epithelial cell line from cervix adenocarcinoma) cell lysate

Lane 2 : HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG HRP at 1/2000 dilution

Predicted band size: 27.9 kDa

Observed band size: 27.9 kDa

Exposure time: 12 minutes

Blocking buffer: 5% milk in TBST.

Color Development: TMB solution.

Primary and secondary antibodies were incubated for 1 hour at RT.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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