

Anti-BDNF antibody ab223354

[1 References](#) [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>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 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

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

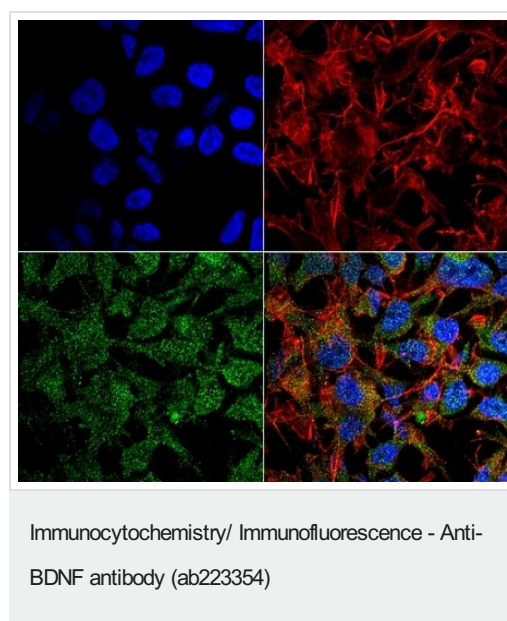
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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

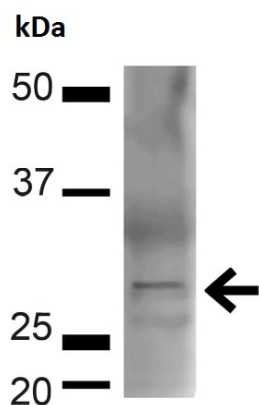
Function	During development, promotes the survival and differentiation of selected neuronal populations of the peripheral and central nervous systems. Participates in axonal growth, pathfinding and in the modulation of dendritic growth and morphology. Major regulator of synaptic transmission and plasticity 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



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 µg

Secondary

Goat Anti-Rabbit IgG HRP at 1/2000 dilution

Predicted band size: 27.9 kDa

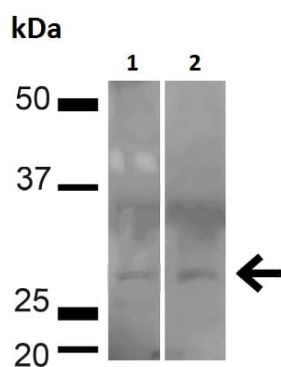
Observed band size: 27.9 kDa

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.

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