abcam

Product datasheet

Anti-S100 beta antibody ab41548

★★★★★ 17 Abreviews 98 References 3 Images

Overview

Product name Anti-S100 beta antibody

Description Rabbit polyclonal to S100 beta

Host species Rabbit

Specificity From Jan 2024, QC testing of replenishment batches of this polyclonal changed. All tested and

expected application and reactive species combinations are still covered by our Abcam product promise. However, we no longer test all applications. For more information on a specific batch, please contact our Scientific Support who will be happy to help. You may also be interested in our

alternative recombinant antibody, ab52642.

Tested applications Suitable for: IHC-P, WB

Unsuitable for: ICC/IF

Species reactivity Reacts with: Mouse, Rat, Zebrafish

Predicted to work with: Rabbit, Cow, Human, Pig, Chinese hamster

Immunogen Synthetic peptide corresponding to Rat S100 beta aa 50 to the C-terminus (C terminal)

conjugated to keyhole limpet haemocyanin.

(Peptide available as ab41547)

General notes

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.

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

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

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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 ab41548 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	★★★★ <u>(10)</u>	Use at an assay dependent concentration.
WB	★★★★☆ (1)	Use a concentration of 1 µg/ml. Detects a band of approximately 9 kDa (predicted molecular weight: 11 kDa).

Application notes Is unsuitable for ICC/IF.

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Function

Weakly binds calcium but binds zinc very tightly-distinct binding sites with different affinities exist for both ions on each monomer. Physiological concentrations of potassium ion antagonize the binding of both divalent cations, especially affecting high-affinity calcium-binding sites. Binds to and initiates the activation of STK38 by releasing autoinhibitory intramolecular interactions within the kinase. Interaction with AGER after myocardial infarction may play a role in myocyte apoptosis

by activating ERK1/2 and p53/TP53 signaling.

Tissue specificity

Although predominant among the water-soluble brain proteins, S100 is also found in a variety of

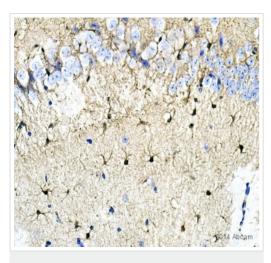
other tissues.

Sequence similarities Belongs to the S-101 family.

Contains 2 EF-hand domains.

Cellular localization Cytoplasm. Nucleus.

Images

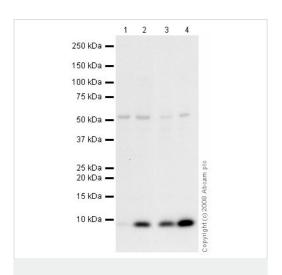


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-S100 beta antibody - Astrocyte Marker (ab41548)

This image is courtesy of an Abreview submitted by Carl Hobbs

ab41548 staining S100 beta in mouse brain tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffinembedded sections). Tissue was fixed with formaldehyde and blocked with 1% BSA for 10 minutes; antigen retrieval was by heat mediation in citric acid. Samples were incubated with primary antibody (1/10000 in TBS/BSA/azide) for 2 hours at 21°C. A Biotinconjugated goat anti-rabbit IgG polyclonal (1/250) was used as the secondary antibody.

At this dilution factor, there is very good delineation of astrocyte processes.



Western blot - Anti-S100 beta antibody - Astrocyte Marker (ab41548)

All lanes: Anti-S100 beta antibody (ab41548) at 1 µg/ml

Lane 1: Brain (Mouse) Tissue Lysate

Lane 2: Brain (Rat) Tissue Lysate

Lane 3 : Spinal Cord (Mouse) Tissue Lysate

Lane 4 : Spinal Cord (Rat) Tissue Lysate

Lysates/proteins at 10 µg per lane.

Secondary

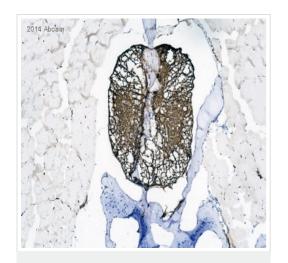
All lanes : Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Performed under reducing conditions.

Predicted band size: 11 kDa **Observed band size:** 9 kDa

Additional bands at: 52 kDa. We are unsure as to the identity of

these extra bands.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-S100 beta antibody -Astrocyte Marker (ab41548)

Image courtesy of Carl Hobbs, King College London, U.K.

ab41548 staining S100 beta in Zebrafish body, showing T/S of spinal cord region by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 1% BSA for 10 minutes; antigen retrieval was by heat mediation in citric acid. Samples were incubated with primary antibody (1/10000 in TBS/BSA/azide) for 2 hours at 21°C. A Biotin-conjugated goat anti-rabbit IgG polyclonal (1/250) was used as the secondary antibody.

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

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