abcam

Product datasheet

Anti-S100 beta antibody [S100B/1012] ab218515

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Overview

Product name Anti-S100 beta antibody [S100B/1012]

Description Mouse monoclonal [S100B/1012] to S100 beta

Host species Mouse

Tested applications Suitable for: Protein Array, ICC, IHC-P

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat, Rabbit, Cow

Immunogen Recombinant full length protein corresponding to Human S100 beta aa 1 to the C-terminus.

Database link: P04271

Run BLAST with
Run BLAST with

Positive control IHC-P: Human melanoma and schwanoma tissues. ICC: Human A2058 cells.

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

General notes

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 pH: 7.2

Preservative: 0.05% Sodium azide Constituents: 0.05% BSA, 99% PBS

Purity Protein A/G purified

Purification notes ab218515 is purified from Bioreactor Concentrate by Protein A/G.

Clonality Monoclonal
Clone number \$100B/1012

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Isotype lgG2a **Light chain type** kappa

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab218515 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
Protein Array		Use at an assay dependent concentration.
ICC		Use a concentration of 1 - 2 μg/ml.
IHC-P		Use a concentration of 0.25 - 0.5 µg/ml. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target

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.

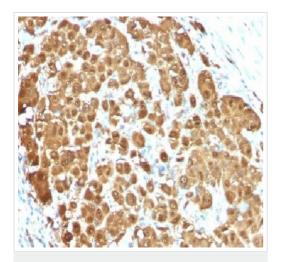
Sequence similarities

Belongs to the S-101 family.
Contains 2 EF-hand domains.

Cellular localization

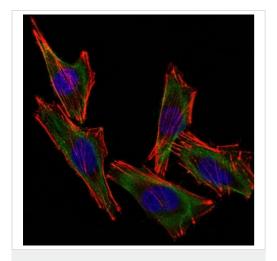
Cytoplasm. Nucleus.

Images



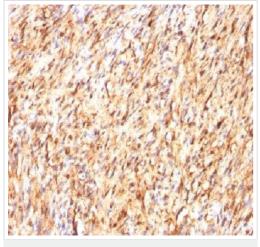
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-S100 beta antibody
[S100B/1012] (ab218515)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human melanoma tissue labeling S100 beta with ab218515 at 0.5 $\mu g/mL.$



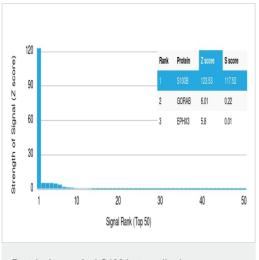
Immunocytochemistry - Anti-S100 beta antibody [S100B/1012] (ab218515)

Immunocytochemistry analysis of A2058 (human epithelial melanoma cell line) cells labeling S100 beta with ab218515 conjugated to AF488 (green). F-actin filaments were labeled with DyLight[®] 554 Phalloidin (red). DAPI was used to stain the cell nuclei (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-S100 beta antibody [S100B/1012] (ab218515)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human schwanoma tissue labeling S100 beta with ab218515 at 0.5 $\mu g/mL$.



Protein Array - Anti-S100 beta antibody [S100B/1012] (ab218515)

ab218515 was tested in protein array against over 19000 different full-length human proteins.

Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-lgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target.

A MAb is specific to its intended target if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.

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

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