



S100B (Astrocyte and Melanoma Marker); Clone 4C4.9 + S100B/1012 (Concentrate)

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| Availability/Contents: | <u>Item #</u> | <u>Volume</u> |
| | RA0680-C.1 | 0.1 ml |
| | RA0680-C.5 | 0.5 ml |
| | RA0680-C1 | 1 ml |

Description:

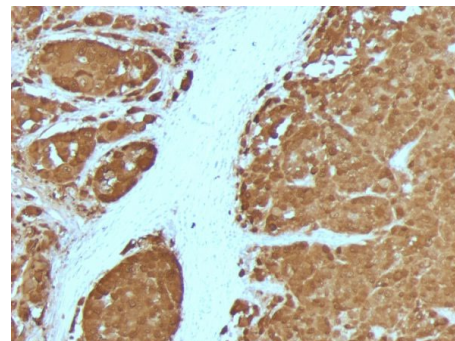
| | |
|--------------------------|---|
| Species: | Mouse |
| Immunogen: | Purified bovine brain S100 protein (4C4.9); Recombinant full-length human S100B protein (S100B/1012) |
| Clone: | 4C4.9 + S100B/1012 |
| Isotype: | IgG2a / Kappa |
| Entrez Gene ID: | 6285 |
| Hu Chromosome Loc.: | 21q22.3 |
| Synonyms: | Protein S100-B, S-100 protein beta chain, S-100 protein subunit beta, S100 calcium-binding protein B, NEF; Protein S100-B; S-100 protein beta chain; S100 calcium binding protein beta (neural); S100 calcium-binding protein B; S100 protein beta chain; S100B; S100beta |
| Mol. Weight of Antigen: | 10-12kDa |
| Format: | 200ug/ml of antibody purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. |
| Specificity: | Recognizes S100B, a protein of 10-12kDa belonging to the family of calcium binding proteins. |
| Background: | S100A and S100B proteins are two members of the S100 family. S100A is composed of an alpha and a beta chain whereas S100B is composed of two beta chains. This antibody is specific against an epitope located on the beta-chain (i.e. in S-100A and S-100B) but not on the alpha-chain of S-100 (i.e. in S-100A and S100A0). This antibody can be used to localize S-100A and S-100B in various tissue sections. S-100 protein has been found in normal melanocytes, Langerhans cells, histiocytes, chondrocytes, lipocytes, skeletal and cardiac muscle, Schwann cells, epithelial and myoepithelial cells of the breast, salivary and sweat glands, as well as in glial cells. Neoplasms derived from these cells also express S-100 protein, albeit non-uniformly. A large number of well-differentiated tumors of the salivary gland, adipose and cartilaginous tissue, and Schwann cell-derived tumors express S-100 protein. Almost all malignant melanomas and cases of histiocytosis X are positive for S-100 protein. |
| Species Reactivity: | Cow, Human, Mouse, Rat |
| Positive Control: | Brain, Melanoma |
| Cellular Localization: | Cytoplasm, Nucleus |
| Titer/ Working Dilution: | Immunohistochemistry (Frozen and Formalin-fixed): 1-2 µg/ml Flow Cytometry: 1-2 µg/million cells Immunofluorescence: 1-3 µg/ml Western Blotting: 2-4 µg/ml |
| Microbiological State: | This product is not sterile. |

Storage: 2° C  8° C



ScyTek Laboratories, Inc.
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 Logan, UT 84321
 U.S.A.

Uses/Limitations: Not to be taken internally.
 For Research Use Only.
 This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.
 Do not use if reagent becomes cloudy.
 Do not use past expiration date.
 Non-Sterile.



Formalin-fixed, paraffin-embedded human Melanoma stained with S100B Mouse Monoclonal Antibody (4C4.9 + S100B/1012).

Ordering Information and Current Pricing at www.scytek.com

Procedure:

1. **Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with Tris-EDTA HIER Solution (10x) pH 9.0 (ScyTek catalog# TES500) or Citrate Plus (10x) HIER Solution (ScyTek catalog# CPL500).
2. **Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.
3. **Visualization:** For maximum staining intensity we recommend the “UltraTek HRP Anti-Polyvalent Lab Pack” (ScyTek catalog# UHP125, see IFU for instructions) combined with the “DAB Chromogen/Substrate Bulk Pack (High Contrast)” (ScyTek catalog# ACV500, see IFU for instructions).

Precautions:


Contains Sodium Azide as a preservative (0.09% w/v).
 Do not pipette by mouth.
 Avoid contact of reagents and specimens with skin and mucous membranes.
 Avoid microbial contamination of reagents or increased nonspecific staining may occur.
 This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.


References:

1. Joshi MG et. al. Modern Pathology, 1996, 9(1):57-62
2. McLaren KM et. al. Human Pathology, 1996, 27(7):633-6

Warranty:

No products or “Instructions For Use (IFU)” are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. ScyTek Laboratories, Inc. is not liable for any property damage, personal injury, time or effort or economic loss caused by our products. Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used.

Storage: 2° C  8° C



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