

### Instructions For Use

### A00087-IFU-IVD

Rev. Date: June 5, 2017

**Revision: 2** 

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P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 - Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

# S-100; Clone 4C4.9 (Ready-To-Use)

Availability/Contents: <u>Item #</u> <u>Volume</u>

 A00087-0002
 2 ml

 A00087-0007
 7 ml

 A00087-0025
 25 ml

**Description:** 

Species: Mouse

Immunogen: Purified bovine brain S100 protein

Clone: 4C4.9 Isotype: IgG2a, kappa

Entrez Gene ID: 6271 (Human); 431787 (Cow); 20193 (Mouse); 295214 (Rat)

Hu Chromosome Loc.: 1q21.3

Synonyms: Bpb; NEF; S100-A1; S100 Alpha Chain; S100 Beta Chain; S100 Calcium Binding Protein A1;

S100 Calcium Binding Protein B; S100 Calcium Binding Protein Beta Neural

Mol. Weight of Antigen: 10-12kDa

Format: This antibody has been pretitered and quality controlled to work on formalin-fixed paraffin-

embedded as well as acetone fixed cryostat tissue sections. No further titration is required.

Specificity: 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.

Background: S100 belongs to the family of calcium binding proteins. S100A and S100B proteins are two

members of the S100 family. S100A is composed of an alpha and beta chain whereas S100B is composed of two beta chains. Despite the fact that S-100 protein is a ubiquitous substance, its

demonstration is of great value in the identification of several neoplasms, particularly

melanomas and their metastases.

Species Reactivity: Human, Mouse, Rat, Cow. Others not known.

Positive Control: Brain and Melanoma.

Cellular Localization: Cytoplasmic

Titer/ Working Dilution: No further dilution is required. Microbiological State: This product is not sterile.

Storage: 2° C 8° C

ScyTek Laboratories, Inc. 205 South 600 West Logan, UT 84321 U.S.A.

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IVD



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**Uses/Limitations:** Not to be taken internally.

For In Vitro Diagnostic Use.

This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded

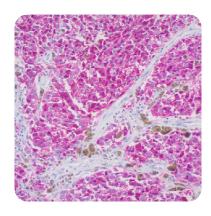
tissue sections, to be viewed by light

microscopy.

Do not use if reagent becomes cloudy. Do not use past expiration date.

Non-Sterile.

Ordering Information and Current Pricing at www.scytek.com



Formalin-fixed, paraffin-embedded human melanoma stained with \$100; Clone 4C4.9.

#### Procedure:

- 1. **Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with Citrate Plus (ScyTek catalog# CPL500).
- 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. Pierini A, Cinti F, Binanti D, Pisani G. Primary leiomyosarcoma of the jugular vein in a dog. Open Veterinary Journal. 2017;7(1):61-4.
- 2. Kuru M, Beytut E, Kaya S, Karakurt E, Kacar C. Vaginal Fibrosarcoma in a Brown Swiss Cow. Ataturk Universitesi Vet. Bil. Derg. 2016; 11(3): pg 327-331.
- 3. Altun A, Saraydin SU, Soylu S, Inan DS, Yasti C, Ozdenkaya Y, Koksal B, Duger C, Isbir C, Turan M. Chemopreventive Effects of Hydatid Disease on Experimental Breast Cancer. Asian Pacific Journal of Cancer Prevention. 2015;16(4):1391-5.
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- 5. Basaran R, Kaksi M, Gur E, Efendioglu M, Balkuv E, Sav A. Monostotic fibrous dysplasia involving occipital bone: a case report and review of literature. The Pan African medical journal. 2014;19.
- Ersoy O, Sekmen U, Goksel S, Hamzaoglu H, Paksoy M. Schwannoma in Ascending Colon: A Rare Cause of Abdominal Pain. Case Reports in Clinical Medicine. 2014 May 12;2014.
- 7. Gündüz M, Yurtçu M, Toy H, Abasiyanik A, Demirci Ş. Immunohistochemical and morphometric evaluation of neuronal dysfunction in pelviureteral junction obstruction. Journal of pediatric urology. 2013 Jun 30;9(3):359-63.











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#### Warranty:

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Storage: 2° C 8° C

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