

# S-100; Clone 4C4.9


## (Concentrate)

<b>Availability/Contents:</b>	<u>Item #</u>	<u>Volume</u>
	A00087-C.1	100 µl
	A00087-C	1 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:	200µg/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
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:	Immunohistochemistry (Frozen and Formalin-fixed): 0.5-1 µg/ml
	Flow Cytometry: 0.5-1 µg/million cells
	Immunofluorescence: 1-2 µg/ml
	Western Blotting: 0.5-1 µg/ml
	Immunoprecipitation: 1-2 µg/500µg protein lysate
Microbiological State:	This product is not sterile.

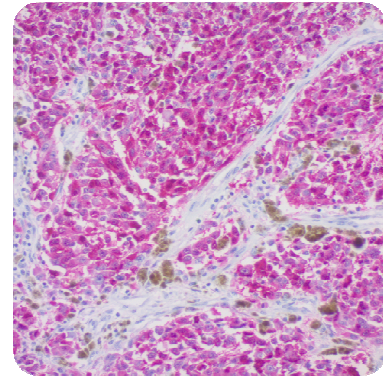
Storage: 2° C  8° C

 ScyTek Laboratories, Inc.  
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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.



Formalin-fixed, paraffin-embedded human melanoma stained with S100; Clone 4C4.9.

**Ordering Information and Current Pricing at [www.scytek.com](http://www.scytek.com)**

**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).
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. 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, Koksall 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.
4. Güler B, Özyılmaz F, Tokuç B, Can N, Taştekin E. Histopathological Features of Gastrointestinal Stromal Tumors and the Contribution of DOG1 Expression to the Diagnosis. Balkan medical journal. 2015 Oct;32(4):388.
5. Basaran R, Kaksi M, Gur E, Efendioğlu 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.
6. 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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Instructions For Use  
**A00087-C-IFU-IVD**

Rev. Date: Dec. 20, 2016


Revision: 1


Page 3 of 3

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**Warranty:**

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