

### Product datasheet for AM32830PU-T

# OriGene Technologies, Inc.

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## S100A1 Mouse Monoclonal Antibody [Clone ID: 4C4.9]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: 4C4.9

**Applications:** FC, IF, IHC, IP, WB

**Recommended Dilution: ELISA:** Use Antibody without BSA for Coating.

Western Blot: 0.5-1 µg/ml.

**Immunoprecipitation:** 1-2 μg/500 μg protein lysate.

**Flow Cytometry:** 0.5-1 μg/106 cells. **Immunofluorescence:** 1-2 μg/ml.

Immunohistochemistry on Frozen and Formalin-Fixed Paraffin Embedded Sections: Use

C4.9 antibody at 0.25-0.5  $\mu$ g/ml for 30 minutes at RT.

Staining of formalin-fixed tissues requires boiling tissue sections in 1mM citrate buffer, pH

6.0, for 10-20 min followed by cooling at RT for 20 minutes.

**Recommended Positive Control:** Brain, Melanoma.

**Reactivity:** Bovine, Human, Mouse, Rat

Host: Mouse Isotype: IgG2a

Clonality: Monoclonal

**Immunogen:** S100 protein purified from Bovine brain.

**Specificity:** This Monoclonal antibody stains S100 protein.

4C4.9 stains Schwannomas, ependymomas, astrogliomas; almost all benign and malignant

melanomas and their metastases. *Cellular Localization*: Cytoplasmic.

Formulation: 10mM PBS

State: Purified

State: Liquid purified IgG fraction from Bioreactor Concentrate

Stabilizer: 0.05% BSA

Preservative: 0.05% Sodium Azide

**Concentration:** lot specific

**Purification:** Protein A/G Chromatography



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Conjugation: Unconjugated

**Storage:** Store undiluted at 2-8°C.

**Stability:** Shelf life: one year from despatch.

Predicted Protein Size: 10-12 kDa

**Gene Name:** S100 calcium binding protein A1

Database Link: Entrez Gene 6271 Human

P23297

**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. 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. Despite the fact that S-100 protein is an ubiquitous substance, its demonstration is of great value in the

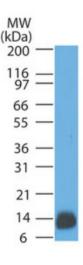
S100 Calcium binding protein, S-100 protein, S100A, S100B, S-100 protein alpha chain, S-100

identification of several neoplasms, particularly melanomas and their metastases.

protein beta chain, Astrocyte Marker

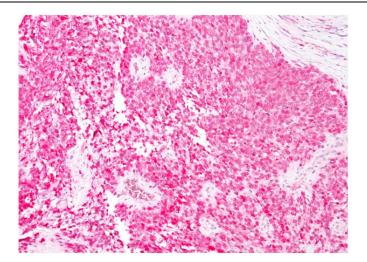
### **Product images:**

Synonyms:

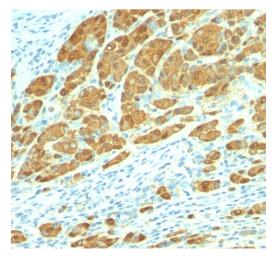


Western blot analysis of Human brain lysate using S100 Antibody at 1 ug/ml.





Formalin-Fixed, Paraffin-Embedded Human melanoma stained with S100 Antibody (Clone 4C4.9).



Formalin-Fixed, Paraffin-Embedded Human melanoma stained with S100 Antibody (Clone 4C4.9).