

# Rabbit anti S100 Polyclonal Antibody

Alternative Name(s): \$100 calcium binding protein A1

### **Order Information**

Description: S100
Catalogue: 500-2144
Lot: See label
Size: 100ug/200ul
Host: Rabbit
Clone: nan

Application: IHC(P)
Reactivity: Hu, Ms, Rt, Bv

#### **ANTIGEN PREPARATION**

Recombinant protein encoding human S100 protein

#### **BACKGROUND**

S100 is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. S100 proteins are localized in the cytoplasm and/or nucleus of a wide range of cells, and involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. The family of EF-hand type Ca2+-binding proteins includes calbindin (previously designated vitamin D-dependent Ca2+-binding protein), S-100 $\alpha$  and  $\beta$ , calgranulins A (also designated MRP8), B (also designated MRP14) and C (S-100 like proteins), and the parvalbumin family members, including parvalbumin  $\alpha$  and parvalbumin  $\beta$ , also designated oncomodulin (OCM). S100 may function in Neurite extension, proliferation of melanoma cells, stimulation of Ca2+ fluxes, inhibition of PKC-mediated phosphorylation, astrocytosis and axonal proliferation, and inhibition of microtubule assembly. Chromosomal rearrangements and altered expression of this gene have been implicated in several neurological, neoplastic, and other types of diseases, including Alzheimer's disease, Down's syndrome, epilepsy, amyotrophic lateral sclerosis, melanoma, and type I diabetes.

# **PURIFICATION**

The Rabbit IgG is purified by Epitope Affinity Purification

## **FORMULATION**

This affinity purified antibody is supplied in sterile Phosphatebuffered saline (pH7.2) containing antibody stabilizer

#### **SPECIFICITY**

This antbody recognizes S100. It cross reacts to human, mice and rat. The other species not tested.

#### STORAGE

The antibodies are stable for 24 months from date of receipt when stored at -20oC to -70oC. The antibodies can be stored at 2oC-8oC for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

# **APPLICATIONS/SUGGESTED WORKING DILUTIONS\***

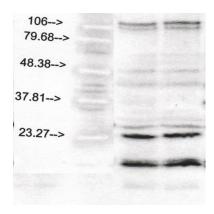
- Western Blot: 0.1-1 μg/ml
- ELISA: 0.01-0.1 μg/ml
- Immunoprecipitation: 2-5 μg/ml
- IHC: 2-10 µg/ml
- Flow cytometry: Not tested
- Molecular Weight: 11.0
- Positive Control: Kidney Tissue
- · Cellular Location: Cell Membrane



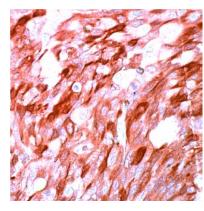
\*Optimal dilutions should be determined by researchers for the specific applications.



# **DATA ATTACHMENTS**



Western Blot: The whole lysate derived from K562 (20 ug/lane) immunoblotted by Rabbit anti –S100 (Cat# 500-2144) at 1:500. Observed a major immunoreactive band at molecular weight ~22 kDa and ~11kDa.



Immunohistochemistry: Human melanoma stained with Rabbit anti S100 antibody (Cat# 500-2144) at 1:300 for 10 min @ RT. Staining of formalin-fixed tissue requires boiling tissue sections in 10 mM Citrate Buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min.

**REFERENCES**