

Product datasheet for **AP08126PU-N**

S100A1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC
Recommended Dilution:	Suitable for Immunohistochemistry and Immunocytochemistry (Frozen or Formalin-Fixed Paraffin-Embedded (FFPE) tissue sections and cell smears): 1/50-1/200 using streptavidin~biotin system or polymer system. Immunofluorescence. <i>This antibody should not be diluted in buffer which contains detergents.</i> Positive control: Melanoma or schwannoma.
Reactivity:	Bovine, Human, Monkey, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Purified S100 protein from Bovine.
Specificity:	This antibody stains schwannoma, ependymomas, astroglomas, almost all benign and malignant melanoma and their metasis. Cellular localization: Cytoplasmic.
Formulation:	10 mM PO ₄ , 150 mM NaCl, pH 7.4 containing 1% BSA and 0.05% Sodium Azide as preservative. State: Purified State: Liquid purified Ig fraction.
Concentration:	lot specific
Purification:	Protein A Chromatography
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C.
Stability:	Shelf life: One year from despatch.
Gene Name:	S100 calcium binding protein A1
Database Link:	Entrez Gene 20193 Mouse Entrez Gene 295214 Rat Entrez Gene 6271 Human P23297



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Background:

S100 protein is a type of low molecular weight protein found in vertebrates characterized by two calcium binding sites of the helix-loop-helix ("EF-hand type") conformation. There are at least 21 different types of S100 proteins. The name is derived from the fact that the protein is 100% Soluble in ammonium sulfate at neutral pH. Most S100 proteins are homodimeric, consisting of two identical polypeptides held together by non-covalent bonds. S100A is composed of an alpha and beta chain whereas S100B is composed of two beta chains. Although S100 proteins are structurally similar to calmodulin, they differ in that they are cell-specific, expressed in particular cells at different levels depending on environmental factors. To contrast, calmodulin is a ubiquitous and universal intracellular Ca⁺⁺ receptor widely expressed in many cells. S-100 is normally present in cells derived from the neural crest (Schwann cells, melanocytes, and glia cells), chondrocyte, adipocytes, myoepithelial cells, macrophages, Langerhans cells, dendritic cells, and keratinocytes. It may be present in some breast epithelial cells.

Synonyms:

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