

AP07684PU-N**Polyclonal Antibody to S100A1 (Full Length) - Purified**

Alternate names:	S-100 protein alpha chain, S-100 protein subunit alpha, S100 alpha, S100 calcium-binding protein A1, S100-A1, S100A
Quantity:	50 µg
Concentration:	1 mg/ml
Background:	<p>S-100 protein derived from brain tissue is an acidic calcium-binding protein with molecular weight of about 21kDa. In human brain tissue S-100 protein is mainly presented as two isoforms - bb homodimer (S-100b) and ab heterodimer (S-100a). Because of its predominant location in astroglial cells S-100 protein can be used as a sensitive and reliable marker for central nervous system injury. Structural damage of glial cells causes leakage of S-100 protein into the extracellular matrix and into cerebrospinal fluid, further releasing into the bloodstream. Measurements of S-100 protein in patient serum samples are useful in monitoring of traumatic brain injury, ischemic brain damage after circulatory arrests, and in diagnosis and prognosis of clinical outcome in acute stroke. Although predominant among the water-soluble brain proteins, S-100 is also found in a variety of other tissues. S-100 is an intracellular protein that weakly binds calcium. It binds zinc very tightly, however, and this appears to increase the affinity of the protein for calcium. Distinct binding sites, with different affinities, exist for both ions on each monomer. Physiological concentrations of potassium ion antagonize the binding of both divalent cations, especially affecting high-affinity calcium-binding sites.</p>
Uniprot ID:	P02639
NCBI:	NP_001092512.1
GeneID:	104968698
Host:	Rabbit
Immunogen:	Full-length bovine S100 protein (mixture of aa homodimers and ab heterodimers)
Format:	State: Liquid purified Ig fraction Purification: Protein A Chromatography Buffer System: PBS, pH 7.2, 0.01% sodium azide
Applications:	ELISA: 1/5000 - 1/20000. Immunohistochemistry on Paraffin Sections: 2.5 µg/ml. Western Blot: 1/500 - 1/3000. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody reacts to S100 Protein.
Species Reactivity:	Tested: Human, Bovine

Storage: Prior to and following reconstitution store the antibody at 2-8°C for one month or at -20°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

Pictures: **Figure 1.** Formalin-Fixed Paraffin-Embedded (FFPE) on Prostate, Nerve.

