



## S100 Polyclonal Antibody

E20-53475

**Catalog Number:**E20-53475**Product name:**S100 Polyclonal Antibody**Amount:**100ul**Applications:**IHC-p,wb**Reactivity:**Human,Rat,Mouse**Gene Name:**S100A1**Protein Name:**Protein S100-A1 (S-100 protein alpha chain) (S-100 protein subunit alpha) (S100 calcium-binding protein A1)**Human Gene Id:**6271**Human Swiss Prot No:**P23297**Mouse Swiss Prot No:**P56565**Rat Swiss Prot No:**P35467**Immunogen:**Recombinant Protein of S100**Specificity:**The antibody detects endogenous S100 protein**Formulation:**Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.**Source:**Rabbit**Dilution:**Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.**Purification:**The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.**Concentration:**1 mg/ml**Storage Stability:**-20°C/1 year**Other Names:**Protein S100-A1 (S-100 protein alpha chain) (S-100 protein subunit alpha) (S100 calcium-binding protein A1)**Observed Band (KD):**15**Background:**S100 calcium binding protein A1(S100A1) Homo sapiens The protein encoded by this gene

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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. S100 genes include at least 13 members which are located as a cluster on chromosome 1q21. This protein may function in stimulation of Ca<sup>2+</sup>-induced Ca<sup>2+</sup> release, inhibition of microtubule assembly, and inhibition of protein kinase C-mediated phosphorylation. Reduced expression of this protein has been implicated in cardiomyopathies. [provided by RefSeq, Jul 2008].

**Function:**function:Weakly binds calcium but binds zinc very tightly-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.,similarity:Belongs to the S-100 family.,similarity:Contains 2 EF-hand domains.,subunit:Dimer of either two alpha chains, or two beta chains, or one alpha and one beta chain.,tissue specificity:Highly prevalent in heart. Also found in lesser quantities in skeletal muscle and brain.

**Subcellular Location:**nucleus,sarcoplasmic reticulum,Z disc,M band,neuron projection,protein complex.

**Expression:**Caudate nucleus,Heart,Skin.

