

## Immunotag™ S-100 α Polyclonal Antibody

| Antibody Specification |                                                                                                                                                                    |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Catalog No.            | ITT5732                                                                                                                                                            |
| Product Description    | Immunotag™ S-100 α Polyclonal Antibody                                                                                                                             |
| Size                   | 50 µg, 100 µg                                                                                                                                                      |
| Conjugation            | HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647                                      |
| IMPORTANT NOTE         | This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return. |
| Target Protein         | S-100 α                                                                                                                                                            |
| Clonality              | Polyclonal                                                                                                                                                         |
| Storage/Stability      | -20°C/1 year                                                                                                                                                       |
| Application            | WB,IHC-p,ELISA                                                                                                                                                     |
| Recommended Dilution   | Western Blot: 1/500 - 1/2000. IHC-p: 1:100-1:300. ELISA: 1/10000. Not yet tested in other applications.                                                            |
| Concentration          | 1 mg/ml                                                                                                                                                            |
| Reactive Species       | Human,Mouse,Rat                                                                                                                                                    |
| Host Species           | Rabbit                                                                                                                                                             |
| Immunogen              | Synthesized peptide derived from Protein S100-A1 at AA range: 1-50                                                                                                 |
| Specificity            | S-100 α Polyclonal Antibody detects endogenous levels of S-100 α protein.                                                                                          |
| Purification           | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen                                               |
| Form                   | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                            |
| Gene Name              | S100A1                                                                                                                                                             |
| Accession No.          | P23297 P56565 P35467                                                                                                                                               |
| Alternate Names        | S100A1; S100A; Protein S100-A1; S-100 protein alpha chain; S-100 protein subunit alpha; S100 calcium-binding protein A1                                            |

## Antibody Specification

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| Description              | S100 calcium binding protein A1(S100A1) Homo sapiens The protein encoded by this gene 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], |
| Protein Expression       | Caudate nucleus,Heart,Skin,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Subcellular Localization | nucleus,sarcoplasmic reticulum,Z disc,M band,neuron projection,protein complex,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Protein 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.,                                                                                                                                                                                             |
| Usage                    | For Research Use Only! Not for diagnostic or therapeutic procedures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |