

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human S100A1 in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant human (rh) S100B, rhS100P, and rhS100A2 is observed.                                                                                              |
| <b>Source</b>             | Polyclonal Sheep IgG                                                                                                                                                                                                                                                        |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human S100A1<br>Met1-Ser94<br>Accession # P23297                                                                                                                                                                                        |
| <b>Conjugate</b>          | Alexa Fluor 350<br>Excitation Wavelength: 346 nm<br>Emission Wavelength: 442 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

## BACKGROUND

S100A1 (also S100 alpha) is a 10 kDa member of the S100 family, EF-hand superfamily of Ca-binding proteins. It is expressed by striated muscle, endothelium and chondrocytes. Intracellularly, S100A1 regulates cytosolic Ca levels, and is part of the Hsp70/Hsp90 multichaperone complex that protects against protein denaturation. Extracellularly, it exists as both a homodimer and heterodimer with S100B, S100A4 and S100P, may bind to RAGE, and blocks apoptosis. Human S100A1 is 94 amino acids (aa) in length. It contains two EF-hand motifs (aa 13-48 and 50-85) and a Ca-dependent protein interaction site (aa 89-91). There may be one alternate start site 53 aa upstream of the standard start site. Full-length human S100A1 shares 93% and 98% aa identity with mouse and canine S100A1, respectively.

## PRODUCT SPECIFIC NOTICES

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