

DESCRIPTION

Species Reactivity	Human
Specificity	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.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human S100A1 Met1-Ser94 Accession # P23297
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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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