

Human S100A1 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF4476

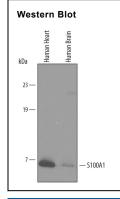
DESCRIPTION		
Species Reactivity	Human	
Specificity	Detects human S100A1 in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant human (rh) S100B, rhS100P, and rhS100A2 is observed.	
Source	Polyclonal Sheep IgG	
Purification	Antigen Affinity-purified	
Immunogen	E. coli-derived recombinant human S100A1 Met1-Ser94 Accession # P23297	
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.	

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.

	Recommended Concentration	Sample
Western Blot	1 μg/mL	See Below

DATA



Detection of Human S100A1 by Western Blot. Western blot shows lysates of human heart and brain tissue. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human S100A1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4476) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for S100A1 at approximately 10 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
	*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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 mutlichaperone 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.

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