

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human and mouse S100A6 in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 1% cross-reactivity with recombinant human (rh) S100A1, rhS100A2, and recombinant mouse S100A4 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse S100A6 Met1-Lys89 Accession # P14069
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 as a 0.2 µm filtered solution in PBS.

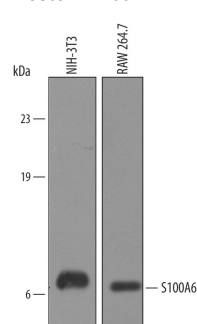
APPLICATIONS

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
Immunohistochemistry	5-15 µg/mL	See Below
Simple Western	10 µg/mL	See Below

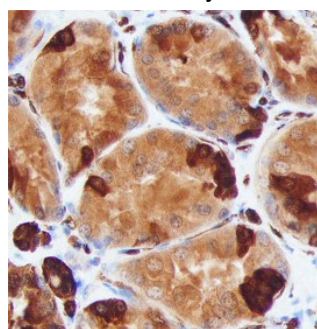
DATA

Western Blot



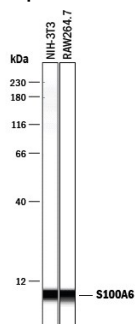
Detection of Mouse S100A6 by Western Blot. Western blot shows lysates of RAW 264.7 mouse monocyte/macrophage cell line and NIH-3T3 mouse embryonic fibroblast cell line. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human/Mouse S100A6 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4584) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for S100A6 at approximately 10 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

Immunohistochemistry



S100A6 in Human Kidney. S100A6 was detected in immersion fixed paraffin-embedded sections of human kidney using Sheep Anti-Human/Mouse S100A6 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4584) at 3 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to epithelial cells in convoluted tubules. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

Simple Western



Detection of Mouse S100A6 by Simple Western™. Simple Western lane view shows lysates of NIH-3T3 mouse embryonic fibroblast cell line and RAW 264.7 mouse monocyte/macrophage cell line, loaded at 0.2 mg/mL. A specific band was detected for S100A6 at approximately 7 kDa (as indicated) using 10 µg/mL of Sheep Anti-Human/Mouse S100A6 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4584) followed by 1:50 dilution of HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

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. <ul style="list-style-type: none"> • 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

Mouse S100A6 (also prolactin receptor-associated protein and calcyclin) is a 10 kDa member of the S100 family of calcium-binding proteins. S100A6 is 89 amino acids (aa) in length and contains two calcium-binding EF-hand domains (aa 12-47 and 48-83). Intracellularly, S100A6 will both noncovalently homodimerize and heterodimerize with S100B plus SGT1. Extracellularly, it is secreted via a noncanonical pathway and binds to RAGE, inducing apoptosis. It is expressed by neurons, endothelium, fibroblasts and glandular epithelia. Mouse S100A6 is 99% and 96% aa identical to rat and human S100A6, respectively.