

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human S100A6 in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant mouse S100A6 and no cross-reactivity with recombinant human (rh) S100A1, rhS100A4, or rhS100B is observed.
Source	Monoclonal Mouse IgG _{2A} Clone # 754102
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human S100A6 Met1-Gly90 Accession # P06703
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	2 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below

DATA

Western Blot

Detection of Human and Mouse S100A6 by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line, RAW 264.7 mouse monocyte/macrophage cell line, and NIH-3T3 mouse embryonic fibroblast cell line. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human S100A6 Monoclonal Antibody (Catalog # MAB7467) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). 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 1.

Immunohistochemistry

S100A6 in Human Kidney. S100A6 was detected in immersion fixed paraffin-embedded sections of human kidney using Mouse Anti-Human S100A6 Monoclonal Antibody (Catalog # MAB7467) at 15 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-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counter-stained with hematoxylin (blue). Specific staining was localized to glomeruli and distal tubules. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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

S100A6, also called PRA (prolactin receptor-associated protein) and calcyclin, is a 10 kDa member of the S100 family of calcium-binding proteins. Human S100A6 is 90 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. Human S100A6 shares 95% aa sequence identity with mouse and rat S100A6. This antibody detects mouse S100A6 in Western Blots. Mouse cross-reactivity has not been tested in Immunohistochemistry