

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human S100A2 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) S100A1, -A6, -A7, -A8, -A10, -A11, -A13, -A16, rhS100B and rhS100P is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human S100A2 Met2-Pro98 Accession # P29034
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.

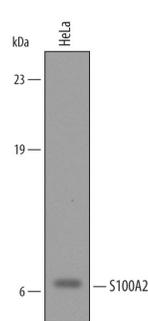
APPLICATIONS

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
Immunocytochemistry	5-15 µg/mL	See Below

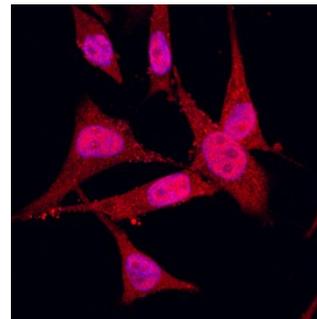
DATA

Western Blot



Detection of Human S100A2 by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line. PVDF membrane was probed with 1 µg/mL of Human S100A2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4870) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for S100A2 at approximately 8 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

Immunocytochemistry



S100A2 in MDA-MB-231 Human Cell Line. S100A2 was detected in immersion fixed MDA-MB-231 human breast cancer cell line using Goat Anti-Human S100A2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4870) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI(blue). Specific staining was localized to nucleus and cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

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

S100A2 (also S100L and CaN19) is a 10 kDa member of the S100 family, EF-hand superfamily of Ca-binding proteins. It is expressed by multiple cell types including keratinocytes, chondrocytes, and bronchial epithelium. S100A2 regulates both Ca and Zn (in human) within cells and increases p53 activity. It forms both noncovalent and covalent homodimers and a homotetramer under certain conditions. Human S100A2 is 98 amino acids (aa) in length. It contains two EF-hand motifs (aa 13-48 and 51-86) plus a calcium (aa 64-75) and zinc (aa 17-22) binding site. There is one potential alternative splice form that shows a 40 aa insertion after Gly48. Full-length human S100A2 shares 89% and 85% aa identity with bovine and canine S100A2, respectively.