

DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human S100P in direct ELISAs and Western blots. In Western blots, less than 5% cross-reactivity with recombinant human (rh) S100B and rhS100A10 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human S100P Met1-Lys95 Accession # P25815
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	0.5 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below
Knockout Validated	S100P is specifically detected in HT-29 human colon adenocarcinoma parental cell line but is not detectable in S100P knockout HT-29 cell line.	

DATA

<p>Western Blot</p>	<p>Detection of Human S100P by Western Blot. Western blot shows lysates of HT-29 human colon adenocarcinoma parental cell line and S100P knockout HT-29 cell line (KO). PVDF membrane was probed with 0.5 µg/mL of Goat Anti-Human S100P Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2957) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for S100P at approximately 10 kDa (as indicated) in the parental HT-29 cell line, but is not detectable in knockout HT-29 cell line. GAPDH (Catalog # AF5718) is shown as a loading control. This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p> <p>S100P in Human Stomach Cancer Tissue. S100P was detected in immersion fixed paraffin-embedded sections of human stomach cancer tissue using Goat Anti-Human S100P Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2957) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
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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

S100P is a member of the S100 protein family, whose members are calcium-binding proteins containing two characteristic E-F hand motifs. S100P proteins exist as homodimers or heterodimers (e.g. with S100A1). They interact with target proteins in a Ca⁺⁺-dependent manner to regulate cell functions. S100P is localized intracellularly but can also be released from cells to act extracellularly. The amino acid sequence of human S100P is 47% identical to that of rat S100P.