

DESCRIPTION

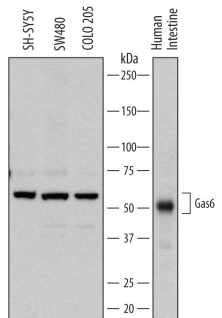
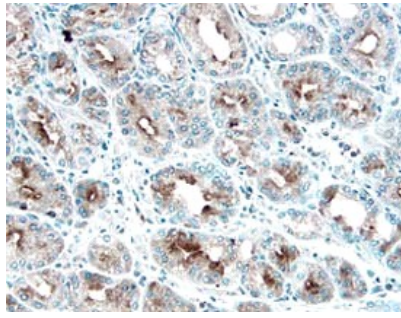
Species Reactivity	Human
Specificity	Detects human Gas6 in direct ELISAs and Western blots. In direct ELISAs, approximately 30% cross-reactivity with recombinant mouse Gas6 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Gas6 Asp118-Ala678 Accession # NP_000811
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

DATA

<p>Western Blot</p>  <p>Detection of Human Gas6 by Western Blot. Western blot shows lysates of SH-SY5Y human neuroblastoma cell line, SW480 human colorectal adenocarcinoma cell line, COLO 205 human colorectal adenocarcinoma cell line, and human intestine tissue. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human Gas6 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF885) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). Specific bands were detected for Gas6 at approximately 64 and 50 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>Gas6 in Human Stomach Cancer Tissue. Gas6 was detected in immersion fixed paraffin-embedded sections of human stomach cancer tissue using 10 µg/mL Goat Anti-Human Gas6 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF885) 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 with 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	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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

Gas6 (Growth Arrest Specific 6) is a multimodular protein that is upregulated by a wide variety of cell types in response to growth arrest (1). Gas6 and the structurally related Protein S are vitamin K-dependent and have an extensively γ -carboxylated N-terminal Gla domain, four EGF-like repeats, and a C-terminal region with homology to steroid hormone binding globulin (SHBG) (2). Human Gas6 is a 75 kDa protein that shares 77-79% amino acid (aa) sequence identity with mouse and rat Gas6 and 43% aa sequence identity with human protein S (over the region expressed). Alternate splicing generates isoforms that lack the Gla domain and/or the spacer between the EGF-like and SHBG regions. Gas6 binds and induces signaling through the receptor tyrosine kinases Axl, Dtk, and Mer (3-5). Human Gas6 interacts with both mouse and rat orthologs of these receptors (1). The full length isoform may be cleaved, resulting in release of the free SHBG region which can independently activate Axl (6). Shed soluble forms of Axl and Mer bind Gas6 and function as decoy receptors (7, 8). Gas6 induces a variety of responses, including prevention of apoptosis (9), cell proliferation (10), platelet-mediated thrombosis (11), retinal epithelial cell phagocytosis of outer rod segments (12), inhibition of VEGF-induced endothelial cell chemotaxis (13), and the differentiation and expansion of NK cell precursors (14). The affinity of Gas6 for phosphatidylserine likely contributes to its role in promoting the phagocytosis of apoptotic cells (15). Several of these effects have been shown to require γ -carboxylation of the Gla domain (12, 16).

References:

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