

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Gas6 in ELISAs and Western blots. In sandwich immunoassays, less than 10% cross-reactivity with recombinant human Gas6 is observed and less than 1% cross-reactivity with recombinant mouse Gas1 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Gas6 (R&D Systems, Catalog # 986-GS) Asp115-Pro673 Accession # CAA42507
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

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	0.1 µg/mL	Recombinant Mouse Gas6 (Catalog # 986-GS)
Mouse Gas6 Sandwich Immunoassay		Reagent
ELISA Capture	0.2-0.8 µg/mL	Mouse Gas6 Antibody (Catalog # AF986)
ELISA Detection	0.1-0.4 µg/mL	Mouse Gas6 Biotinylated Antibody (Catalog # BAF986)
Standard		Recombinant Mouse Gas6 (Catalog # 986-GS)

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.
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

Growth arrest-specific gene 6 (Gas6) was initially characterized as a gene whose expression was up-regulated in serum starved NIH 3T3 fibroblasts and whose expression is down-regulated during growth induction. Mouse Gas6 is a 673 amino acid protein that shares 81% identity to its human homolog. Gas6 is a member of the vitamin K-dependent family of proteins that includes human protein S, a negative coregulator in the blood coagulation pathway. Gas6 and protein S share structural motifs that characterize this family: an extensively γ -carboxylated amino terminus (Gla domain), four EGF-like repeats, and a carboxy terminus containing globular (G) domains with homology to steroid hormone-binding globulin. It is a ligand for the Axl (Ufo/Ark), Sky (Dtk/Tyro3/Rse/Brk/Tif), and Mer (EyK) families of tyrosine kinase receptors. Gas6 binds to these receptors via tandem G domains at its C-terminus. Gas6 is ubiquitously expressed, but most abundantly in lung, intestine, bone marrow and endothelium.

Gas6 has been implicated in a variety of biological processes. It serves as a mitogen for fibroblasts, endothelial cells, neural cells, vascular smooth muscle cells and several tumor-derived cell lines. In addition, Gas6 prevents apoptosis, independent of its mitogenic activity. Gas6 is capable of inducing cell adhesion and chemotaxis in specific cell types. It also supports vitamin K-independent hematopoiesis when expressed by stromal cells. Gas6 signal transduction following Axl/Sky/Mer receptor activation has been reported to occur through such diverse signaling pathways as PI3K, MAP kinase, Src, Ras and β -catenin.

References:

1. Manfioletti, G. *et al.* (1993) *Mol. Cell Biol.* **13**:4976.
2. Goruppi, S. *et al.* (1996) *Oncogene* **12**:471.
3. Crosier, K and P. Crosier (1997) *Pathology* **29**:131.
4. Dormady, S. *et al.* (2000) *Proc. Natl. Acad. Sci. USA* **97**:12260.
5. Goruppi, S. *et al.* (2001) *Mol. Cell Biol.* **21**:902.