

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Mouse                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | 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.                                                 |
| <b>Source</b>             | Polyclonal Goat IgG                                                                                                                                                                                                                                                         |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant mouse Gas6 (R&D Systems, Catalog # 986-GS)<br>Asp115-Pro673<br>Accession # CAA42507                                                                                                                                         |
| <b>Conjugate</b>          | Alexa Fluor 350<br>Excitation Wavelength: 346 nm<br>Emission Wavelength: 442 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## 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.

|                                                |                                                                        |
|------------------------------------------------|------------------------------------------------------------------------|
| <b>ELISA Capture (Matched Antibody Pair)</b>   | Optimal dilution of this antibody should be experimentally determined. |
| <b>ELISA Detection (Matched Antibody Pair)</b> | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b>                    | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## 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.

## PRODUCT SPECIFIC NOTICES

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