# SANTA CRUZ BIOTECHNOLOGY, INC.

# Gas1 (C-17): sc-9585



### BACKGROUND

Growth arrest specific proteins, including Gas1 and Gas6, are activated in quiescent cells. Gas1-induced growth arrest is mediated by p53, and Gas1 appears to be able to suppress tumor cell growth. Gas6, a ligand for the tyrosine kinase receptor AxI, was initially identified as a member of the vitamin K-dependent protein family and exhibits a high degree of amino acid sequence homology to protein S, a negative co-regulator in the coagulation pathway.

#### **REFERENCES**

- Schneider, C., et al. 1988. Genes specifically expressed at growth arrest of mammalian cells. Cell 54: 787-793.
- Del Sal, G., et al. 1992. The growth arrest-specific gene, gas1, is involved in growth suppression. Cell 70: 595-607.

#### CHROMOSOMAL LOCATION

Genetic locus: GAS1 (human) mapping to 9q21.33.

#### SOURCE

Gas1 (C-17) is available as either goat (sc-9585) or rabbit (sc-9585-R) polyclonal affinity purified antibody raised against a peptide mapping at the C-terminus of Gas1 of human origin.

# PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-9585 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

#### **APPLICATIONS**

Gas1 (C-17) is recommended for detection of Gas1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Gas1 siRNA (h): sc-37435, Gas1 shRNA Plasmid (h): sc-37435-SH and Gas1 shRNA (h) Lentiviral Particles: sc-37435-V.

Molecular Weight of Gas1: 45 kDa.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: for goat primary antibody (sc-9585): use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), for rabbit primary antibody (sc-9585-R): use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: for goat primary antibody (sc-9585): use donkey antigoat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941, for rabbit primary antibody (sc-9585-R): use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: for goat primary antibody (sc-9585): use Immuno-Cruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems, for rabbit primary antibody (sc-9585-R): use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

# DATA



Gas1 (C-17): sc-9585. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic staining of trophoblastic cells and decidual cells (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic staining of cell in seminiferus ducts & Leydig cells. Kindly provided by The Swedish Human Protein Atlas (IHA) program (**B**)

#### SELECT PRODUCT CITATIONS

- Kuppers, R., et al. 2003. Identification of Hodgkin and Reed-Sternberg cell-specific genes by gene expression profiling. J. Clin. Invest. 111: 529-537.
- Jiang, Z., et al. 2011. Down-regulated GAS1 expression correlates with recurrence in stage II and III colorectal cancer. Hum. Pathol. 42: 361-368.
- Chapuis, J., et al. 2011. Growth arrest-specific 1 binds to and controls the maturation and processing of the amyloid-β precursor protein. Hum. Mol. Genet. 20: 2026-2036.
- Chapuis, J., et al. 2012. Gas1 interferes with AβPP trafficking by facilitating the accumulation of immature AβPP in endoplasmic reticulum-associated raft subdomains. J. Alzheimers Dis. 28: 127-135.