# SANTA CRUZ BIOTECHNOLOGY, INC.

# Gas8 (F-20): sc-79487



## BACKGROUND

Gas8 (growth arrest-specific 8), also known as Gas11, is a 478 amino acid protein that localizes to the Golgi apparatus, as well as to the cytoplasm and the flagellar basal body, and belongs to the growth arrest-specific protein family. Expressed in liver, heart and skeletal muscle with lower levels present in lung, brain, kidney and placenta, Gas8 functions as a cytoskeletal linker that binds microtubules and is thought to play a role in axonemal and nonaxonemal dynein regulation. Gas8 may also be involved in spermatozoa motility and, when defective, may be associated with infertility in males lacking gametocytes. The gene encoding Gas8 maps to a region on human chromosome 16 that is frequently deleted in breast and prostate cancer, suggesting a role for Gas8 in tumorigenesis.

#### REFERENCES

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- Yeh, S.D., Chen, Y.J., Chang, A.C., Ray, R., She, B.R., Lee, W.S., Chiang, H.S., Cohen, S.N. and Lin-Chao, S. 2002. Isolation and properties of Gas8, a growth arrest-specific gene regulated during male gametogenesis to produce a protein associated with the sperm motility apparatus. J. Biol. Chem. 277: 6311-6317.
- Ralston, K.S. and Hill, K.L. 2006. Trypanin, a component of the flagellar Dynein regulatory complex, is essential in bloodstream form African trypanosomes. PLoS Pathog. 2: e101.
- Colantonio, J.R., Bekker, J.M., Kim, S.J., Morrissey, K.M., Crosbie, R.H. and Hill, K.L. 2006. Expanding the role of the Dynein regulatory complex to non-axonemal functions: association of Gas11 with the Golgi apparatus. Traffic 7: 538-548.

#### CHROMOSOMAL LOCATION

Genetic locus: GAS8 (human) mapping to 16q24.3; Gas8 (mouse) mapping to 8 E2.

## SOURCE

Gas8 (F-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Gas8 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-79487 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **APPLICATIONS**

Gas8 (F-20) is recommended for detection of Gas8 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Gas8 (F-20) is also recommended for detection of Gas8 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Gas8 siRNA (h): sc-75107, Gas8 siRNA (m): sc-75108, Gas8 shRNA Plasmid (h): sc-75107-SH, Gas8 shRNA Plasmid (m): sc-75108-SH, Gas8 shRNA (h) Lentiviral Particles: sc-75107-V and Gas8 shRNA (m) Lentiviral Particles: sc-75108-V.

Molecular Weight of Gas8: 60 kDa.

Positive Controls: Gas8 (m): 293T Lysate: sc-120423.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat 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.

#### DATA



Gas8 (F-20): sc-79487. Western blot analysis of Gas8 expression in non-transfected: sc-117752 (A) and mouse Gas8 transfected: sc-120423 (B) 293T whole cell lysates.

# **RESEARCH USE**

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

