

Gas8 (m): 293T Lysate: sc-120423

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 non-axonemal 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

- Whitmore, S.A., et al. 1998. Characterization and screening for mutations of the growth arrest-specific 11 (Gas11) and C16orf3 genes at 16q24.3 in breast cancer. *Genomics* 52: 325-331.
- Yeh, S.D., et al. 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., et al. 2006. Expanding the role of the dynein regulatory complex to non-axonemal functions: association of GAS11 with the Golgi apparatus. *Traffic* 7: 538-548.
- Bekker, J.M., et al. 2007. Direct interaction of Gas11 with microtubules: implications for the dynein regulatory complex. *Cell Motil. Cytoskeleton* 64: 461-473.
- Nishimura, N., et al. 2008. Interaction of Rab3B with microtubule-binding protein Gas8 in NIH 3T3 cells. *Arch. Biochem. Biophys.* 474: 136-142.
- Colantonio, J.R., et al. 2009. The dynein regulatory complex is required for ciliary motility and otolith biogenesis in the inner ear. *Nature* 457: 205-209.
- Online Mendelian Inheritance in Man, OMIM™. 2009. Johns Hopkins University, Baltimore, MD. MIM Number: 605178. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: Gas8 (mouse) mapping to 8 E2.

PRODUCT

Gas8 (m): 293T Lysate represents a lysate of mouse Gas8 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

Gas8 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Gas8 antibodies. Recommended use: 10-20 µl per lane.

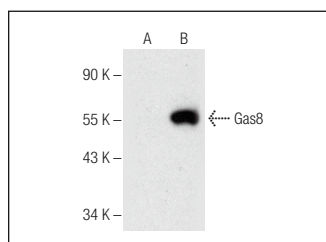
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Gas8 (G-12): sc-390346 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Gas8 expression in Gas8 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

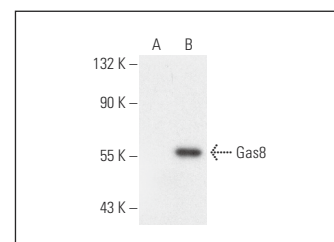
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Gas8 (G-12): sc-390346. Western blot analysis of Gas8 expression in non-transfected: sc-117752 (A) and mouse Gas8 transfected: sc-120423 (B) 293T whole cell lysates.



Gas8 (E-11): sc-393638. 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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.