SANTA CRUZ BIOTECHNOLOGY, INC.

GSC (L-36): sc-81964

BACKGROUND

Goosecoid (GSC) is a homeodomain transcription factor with DNA binding specificity identical to that of the anterior morphogen "bicoid" in *Drosophila*. During mouse embryogenesis, GSC influences development of the lower mandible and its associated musculature, including the tongue, the nasal cavity and the nasal pits, as well as components of the inner ear and the external auditory meatus. The GSC gene encodes a member of the bicoid subfamily of the paired (PRD) homeobox family of proteins.

REFERENCES

1. Yao, J., et al. 2001. Goosecoid promotes head organizer activity by direct repression of Xwnt8 in Spemann's organizer. Development 128: 2975-2987.
2. Lartillot, N., et al. 2002. Expression patterns of fork head and goosecoid homologues in the mollusc *Patella vulgata* supports the ancestry of the anterior mesendoderm across Bilateria. Dev. Genes Evol. 212: 551-561.
3. Asbreuk, C.H., et al. 2002. Survey for paired-like homeodomain gene expression in the hypothalamus: restricted expression patterns of Rx, ALX4 and goosecoid. Neuroscience 114: 883-889.
4. Borges, A.C., et al. 2002. Goosecoid and cerberus-like do not interact during mouse embryogenesis. Int. J. Dev. Biol. 46: 259-262.
5. Adhikary, S., et al. 2003. Miz-1 is required for early embryonic development during gastrulation. Mol. Cell. Biol. 23: 7648-7657.
6. Namciu, S.J., et al. 2004. Sequence organization and matrix attachment regions of the human serine protease inhibitor gene cluster at 14q32.1. Mamm. Genome 15: 162-178.
7. Patwardhan, V., et al. 2004. Acceleration of early chick embryo morphogenesis by Insulin is associated with altered expression of embryonic genes. Int. J. Dev. Biol. 48: 319-326.
8. SWISS-PROT/TrEMBL (NP_776248). World Wide Web URL: http://www.expasy.ch/sprot/sprot-top.html.

CHROMOSOMAL LOCATION

Genetic locus: GSC (human) mapping to 14q32.13; Gsc (mouse) mapping to 12 E.

SOURCE

GSC (L-36) is a mouse monoclonal antibody raised against recombinant GSC of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

GSC (L-36) is recommended for detection of GSC of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for GSC siRNA (h): sc-43822, GSC siRNA (m): sc-145793, GSC shRNA Plasmid (h): sc-43822-SH, GSC shRNA Plasmid (m): sc-145793-SH, GSC shRNA (h) Lentiviral Particles: sc-43822-V and GSC shRNA (m) Lentiviral Particles: sc-145793-V.

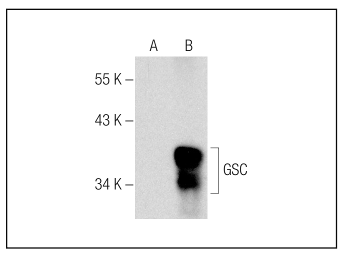
Molecular Weight of GSC: 28 kDa.

Positive Controls: GSC (m): 293T Lysate: sc-178707, HeLa whole cell lysate: sc-2200 or COLO 320 HSR whole cell lysate.

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, 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).

DATA



GSC (L-36): sc-81964. Western blot analysis of GSC expression in non-transfected: sc-117752 (**A**) and mouse GSC transfected: sc-178707 (**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.