

GSC (N-12): sc-22234

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. and Kessler, D.S. 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.

CHROMOSOMAL LOCATION

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

SOURCE

GSC (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of GSC of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-22234 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GSC (N-12) 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)], 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).

GSC (N-12) is also recommended for detection of GSC in additional species, including bovine, porcine and avian.

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.

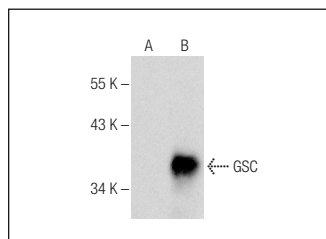
Molecular Weight of GSC: 28 kDa.

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

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



GSC (N-12): sc-22234. Western blot analysis of GSC expression in non-transfected: sc-117752 (A) and mouse GSC transfected: sc-178707 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Zhang, P., et al. 2008. Short-term BMP-4 treatment initiates mesoderm induction in human embryonic stem cells. *Blood* 111: 1933-1941.
2. Sui, L., et al. 2012. FGF signaling via MAPK is required early and improves Activin A-induced definitive endoderm formation from human embryonic stem cells. *Biochem. Biophys. Res. Commun.* 426: 380-385.
3. Ghanbari, A., et al. 2013. Sonic hedgehog inhibition induces mouse embryonic stem cells to differentiate toward definitive endoderm. *Indian J. Exp. Biol.* 51: 201-207.

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.

MONOS
Satisfaction
Guaranteed

Try **GSC (L-36): sc-81964**, our highly recommended monoclonal alternative to GSC (N-12).