

NGX6 (G-13): sc-131992

BACKGROUND

Nasopharyngeal carcinoma (NPC) is a common cancer in South China, but is not usually found in other parts of the world. NPC is characterized by orofacial pain and altered nerve sensation as well as a tendency to metastasize. The NPC associated gene 6 (NGX6) is located at a chromosomal location with a high frequency of loss of heterozygosity (LOH). The NGX6 protein contains an epidermal growth factor-like domain and a cytoplasmic region, both of which play a role in modulating cell adhesion. The cytoplasmic domain also functions to regulate growth, proliferation and migration through its association with ezrin and the ability of the NGX6 protein to downregulate ezrin expression. NGX6 also inhibits transcriptional activation of β -catenin/TCF/LEF in the Wnt signaling pathway by negatively regulating the nuclear translocation of β -catenin.

REFERENCES

- Li, J., Tan, C., Xiang, Q., Zhang, X., Ma, J., Wang, J.R., Yang, J., Li, W., Shen, S.R., Liang, S. and Li, G. 2001. Proteomic detection of changes in protein synthesis induced by NGX6 transfected in human nasopharyngeal carcinoma cells. *J. Protein Chem.* 20: 265-271.
- Xiong, W., Zeng, Z.Y., Li, X.L., Li, W.F., Li, J., He, L. and Li, G.Y. 2002. Single-nucleotide polymorphisms in NGX6 gene and their correlation with nasopharyngeal carcinoma. *Sheng Wu Hua Xue Yu Sheng Wu Wu Li Xue Bao* 34: 512-515.
- Ma, J., Zhou, J., Fan, S., Wang, L., Li, X., Yan, Q., Zhou, M., Liu, H., Zhang, Q., Zhou, H., Gan, K., Li, Z., Peng, C., Xiong, W., Tan, C., Shen, S., Yang, J., Li, J. and Li, G. 2005. Role of a novel EGF-like domain-containing gene NGX6 in cell adhesion modulation in nasopharyngeal carcinoma cells. *Carcinogenesis* 26: 281-291.
- Wang, L., Ma, J., Li, J., Li, X., Zhang, Q., Peng, S., Peng, C., Zhou, M., Xiong, W., Yang, J., Zhou, J., Fan, S., Tan, C., Yan, Q., Shen, S. and Li, G. 2005. NGX6 gene inhibits cell proliferation and plays a negative role in EGFR pathway in nasopharyngeal carcinoma cells. *J. Cell. Biochem.* 95: 64-73.
- Peng, S.P., Li, X.L., Wang, L., Ou-Yang, J., Ma, J., Wang, L.L., Liu, H.Y., Zhou, M., Tang, Y.L., Li, W.S., Luo, X.M., Cao, L., Tang, K., Shen, S.R. and Li, G.Y. 2006. The role of NGX6 and its deletion mutants in the proliferation, adhesion and migration of nasopharyngeal carcinoma 5-8F cells. *Oncology* 71: 273-281.
- Peng, S., Fan, S., Li, X., Wang, L., Liu, H., Zhou, M., Wang, L., Shen, S. and Li, G. 2007. The expression of ezrin in NPC and its interaction with NGX6, a novel candidate suppressor. *Cancer Sci.* 98: 341-349.
- Xiao, Z.M., Shen, S.R., Lian, P., Wang, X.Y. and Liu, F. 2007. Intrasplenic tumor model of nude mice in the anti-metastasis roles of NGX6 gene against colon cancer. *Zhong Nan Da Xue Xue Bao Yi Xue Ban* 32: 753-757.

CHROMOSOMAL LOCATION

Genetic locus: TMEM8B (human) mapping to 9p13.3; Tmem8b (mouse) mapping to 4 B1.

RESEARCH USE

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

SOURCE

NGX6 (G-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NGX6 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-131992 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NGX6 (G-13) is recommended for detection of NGX6 isoforms 1, 2 and 3 of mouse, rat and 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other NGX family members.

NGX6 (G-13) is also recommended for detection of NGX6 isoforms 1, 2 and 3 in additional species, including bovine and porcine.

Suitable for use as control antibody for NGX6 siRNA (h): sc-92697, NGX6 siRNA (m): sc-140103, NGX6 shRNA Plasmid (h): sc-92697-SH, NGX6 shRNA Plasmid (m): sc-140103-SH, NGX6 shRNA (h) Lentiviral Particles: sc-92697-V and NGX6 shRNA (m) Lentiviral Particles: sc-140103-V.

Molecular Weight of NGX6: 52 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

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) 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.

STORAGE

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

PROTOCOLS

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