# 2300002M23Rik (L-13): sc-162451



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#### **BACKGROUND**

2300002M23Rik, also known as extracellular matrix protein with prion homology (Emprin) or STG, is a 349 amino acid secreted protein that has been found to bind to numerous extracellular matrix proteins. Based on sequence similarities, 2300002M23Rik is the murine homolog of the human protein STG. STG, also known as C6orf15 (chromosome 6 open reading frame 15), is a 325 amino acid protein that binds numerous extracellular matrix proteins and is expressed in taste buds, skin and tonsils. STG is a secreted protein that contains an N-terminal signal peptide, potential 0-gly-cosylation sites and multiple tandem repeats. STG localizes to the extracellular matrix and likely plays a role in taste cell physiology. STG is encoded by a gene that maps to human chromosome 6p21.33, a region associated with lung cancer and follicular lymphoma susceptibility.

# **REFERENCES**

- Oka, A., Tamiya, G., Tomizawa, M., Ota, M., Katsuyama, Y., Makino, S., Shiina, T., Yoshitome, M., Iizuka, M., Sasao, Y., Iwashita, K., Kawakubo, Y., Sugai, J., Ozawa, A., Ohkido, M., Kimura, M., Bahram, S. and Inoko, H. 1999. Association analysis using refined microsatellite markers localizes a susceptibility locus for psoriasis vulgaris within a 111 kb segment telomeric to the HLA-C gene. Hum. Mol. Genet. 8: 2165-2170.
- 2. Neira, M., Danilova, V., Hellekant, G. and Azen, E.A. 2001. A new gene (rmSTG) specific for taste buds is found by laser capture microdissection. Mamm. Genome 12: 60-66.
- Sánchez, F., Holm, S.J., Mallbris, L., O'Brien, K.P. and Stahle, M. 2004.
  STG does not associate with psoriasis in the Swedish population. Exp. Dermatol. 13: 413-418.
- Lazzell, D.R., Belizaire, R., Thakur, P., Sherry, D.M. and Janz, R. 2004.
  SV2B regulates synaptotagmin 1 by direct interaction. J. Biol. Chem. 279: 52124-52131.
- Wang, Y., Broderick, P., Webb, E., Wu, X., Vijayakrishnan, J., Matakidou, A., Qureshi, M., Dong, Q., Gu, X., Chen, W.V., Spitz, M.R., Eisen, T., Amos, C.I. and Houlston, R.S. 2008. Common 5p15.33 and 6p21.33 variants influence lung cancer risk. Nat. Genet. 40: 1407-1409.

## CHROMOSOMAL LOCATION

Genetic locus: 2300002M23Rik (mouse) mapping to 17 B1.

# **SOURCE**

2300002M23Rik (L-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of 2300002M23Rik of mouse origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-162451 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

2300002M23Rik (L-13) is recommended for detection of 2300002M23Rik of mouse and rat 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).

Suitable for use as control antibody for 2300002M23Rik siRNA (m): sc-108638, 2300002M23Rik shRNA Plasmid (m): sc-108638-SH and 2300002M23Rik shRNA (m) Lentiviral Particles: sc-108638-V.

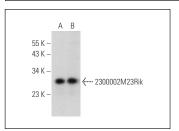
Molecular Weight of 2300002M23Rik: 37 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210 or KNRK whole cell lysate: sc-2214.

## **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**



2300002M23Rik (L-13): sc-162451. Western blot analysis of 2300002M23Rik expression in KNRK (**A**) and NIH/3T3 (**B**) whole cell lysates.

## 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.

## **PROTOCOLS**

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

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