

FLRG (N-18): sc-21302

BACKGROUND

A t(11;19)(q13;p13) translocation observed in a case of B-cell chronic lymphocytic leukemia led to the juxtaposition of the CCND1 gene on chromosome 11 to a new transcriptional unit on chromosome 19, FLRG. FLRG (follistatin-related gene, follistatin-like-3 or FSTL3) is a member of the follistatin-module protein family, which is composed of extracellular matrix-associated glycoproteins thought to act in a paracrine manner to bind morphogens or growth/differentiation factors and regulate their activity during development. The FSTL3 protein contains two potential N-glycosylation sites and the predicted mass of the unmodified core protein is 27 kDa. FLRG is expressed in a wide range of human and murine adult tissues and its expression seems to be tightly regulated during murine embryogenesis. Immunohistochemistry reveals the presence of FLRG in the basement membrane between the dermis and the epidermis and around blood vessels.

REFERENCES

1. Rimokh, R., et al. 1993. Rearrangement and overexpression of the BCL-1/PRAD-1 gene in intermediate lymphocytic lymphomas and in t(11q13)-bearing leukemias. *Blood* 81: 3063-3067.
2. Hayette, S., et al. 1998. FLRG (follistatin-related gene), a new target of chromosomal rearrangement in malignant blood disorders. *Oncogene* 16: 2949-2954.
3. Tsuchida, K., et al. 2000. Identification and characterization of a novel follistatin-like protein as a binding protein for the TGF β family. *J. Biol. Chem.* 275: 40788-40796.
4. Tsuchida, K., et al. 2001. Intracellular and extracellular control of activin function by novel regulatory molecules. *Mol. Cell. Endocrinol.* 180: 25-31.

CHROMOSOMAL LOCATION

Genetic locus: FSTL3 (human) mapping to 19p13.3; Fstl3 (mouse) mapping to 10 C1.

SOURCE

FLRG (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FLRG 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-21302 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

FLRG (N-18) is recommended for detection of precursor and mature FLRG of mouse, rat, human and origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

FLRG (N-18) is also recommended for detection of precursor and mature FLRG in additional species, including canine and bovine.

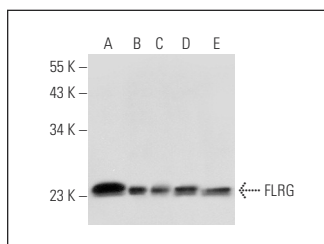
Suitable for use as control antibody for FLRG siRNA (h): sc-39760, FLRG siRNA (m): sc-39761, FLRG shRNA Plasmid (h): sc-39760-SH, FLRG shRNA Plasmid (m): sc-39761-SH, FLRG shRNA (h) Lentiviral Particles: sc-39760-V and FLRG shRNA (m) Lentiviral Particles: sc-39761-V.

Positive Controls: CCRF-CEM cell lysate: sc-2225, HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

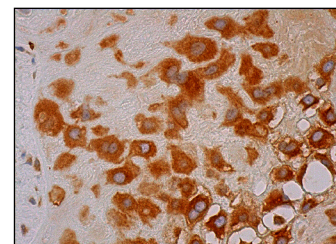
RECOMMENDED SECONDARY REAGENTS

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) 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



FLRG (N-18): sc-21302. Western blot analysis of FLRG expression in CCRF-CEM (A), HeLa (B), Jurkat (C), Hep G2 (D) and MOLT-4 (E) whole cell lysates.



FLRG (N-18): sc-21302. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic staining of decidual cells.

SELECT PRODUCT CITATIONS

1. Willoughby, D., et al. 2004. Effects of concentric and eccentric muscle actions on serum myostatin and follistatin-like related gene levels. *J. Sports Sci. Med.* 3: 226-233.
2. Peiris, H.N., et al. 2010. Brief communication: sexual dimorphic expression of myostatin and follistatin like-3 in a rat *trans*-generational under-nutrition model. *Nutr. Metab.* 7: 44.