

Flg (m): 293T Lysate: sc-120285

BACKGROUND

Acidic and basic fibroblast growth factors (FGFs) are members of a family of multifunctional polypeptide growth factors that stimulate proliferation of cells of mesenchymal, epithelial and neuroectodermal origin. Like other growth factors, FGFs act by binding and activating specific cell surface receptors. These include the Flg receptor (FGFR-1), the Bek receptor (FGFR-2), FGFR-3, FGFR-4, FGFR-5 and FGFR-6. These receptors usually contain an extracellular ligand-binding region containing three immunoglobulin-like domains, a transmembrane domain and a cytoplasmic tyrosine kinase domain. The gene encoding human Flg maps to chromosome 8p11 and is alternatively spliced to produce several isoforms. Mutations in Flg are associated with Pfeiffer syndrome (a skeletal disorder characterized by craniosynostosis with deviation and enlargement of the thumbs and great toes), brachymesophalangy with phalangeal ankylosis and a varying degree of soft tissue syndactyly. The Flg gene is also involved in chromosomal translocations with ZNF198, CEP110 and FOP, which may lead to stem cell leukemia lymphoma (SCLL).

REFERENCES

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4. Mansukhani, A., et al. 1992. Characterization of the murine Bek fibroblast growth factor (FGF) receptor: activation by three members of the FGF family and requirement for heparin. *Proc. Natl. Acad. Sci. USA* 89: 3305-3309.
5. Jin, Y., et al. 1994. Cloning and expression of fibroblast growth factor receptor-1 isoforms in the mouse heart: evidence for isoform switching during heart development. *J. Mol. Cell. Cardiol.* 26: 1449-1459.
6. Muenke, M., et al. 1994. A common mutation in the fibroblast growth factor receptor-1 gene in Pfeiffer syndrome. *Nat. Genet.* 8: 269-274.
7. Fioretos, T., et al. 2001. Fusion of the Bcr and the fibroblast growth factor receptor-1 (FGFR-1) genes as a result of t(8;22)(p11;q11) in a myeloproliferative disorder: the first fusion gene involving Bcr but not Abl. *Genes Chromosomes Cancer* 32: 302-310.

CHROMOSOMAL LOCATION

Genetic locus: Fgfr1 (mouse) mapping to 8 A2.

PRODUCT

Flg (m): 293T Lysate represents a lysate of mouse Flg transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

Flg (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Flg antibodies. Recommended use: 10-20 µl per lane.

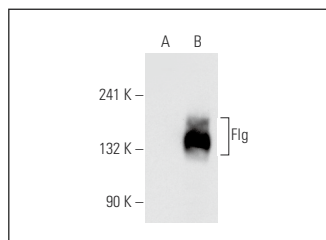
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Flg (M2F12): sc-57132 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Flg expression in Flg transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Flg (M2F12): sc-57132. Western blot analysis of Flg expression in non-transfected: sc-117752 (A) and mouse Flg transfected: sc-120285 (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.