

FGF-15 (P-20): sc-16816

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 receptors usually contain an extracellular ligand-binding region containing three immunoglobulin-like domains, a transmembrane domain and a cytoplasmic tyrosine kinase domain. Fibroblast growth factor-15 (FGF-15), a secreted protein expressed mainly in the developing brain, is important for cell division and patterning regulation in specific embryonic brain regions.

REFERENCES

1. Rifkin, D.B., et al. 1989. Recent developments in the cell biology of fibroblast growth factor. *J. Cell Biol.* 109: 1-6.
2. Dionne, C.A., et al. 1990. Cloning and expression of two distinct high-affinity receptors cross-reacting with acidic and basic fibroblast growth factors. *EMBO J.* 9:2685-2692.
3. 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.
4. Gimeno, L., et al. 2002. Analysis of FGF-15 expression pattern in the mouse neural tube. *Brain Res. Bull.* 57: 297-299.

CHROMOSOMAL LOCATION

Genetic locus: *Fgf15* (mouse) mapping to 7 F5.

SOURCE

FGF-15 (P-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of FGF-15 of mouse 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-16816 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FGF-15 (P-20) is recommended for detection of precursor and mature FGF-15 of mouse and rat 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).

Suitable for use as control antibody for FGF-15 siRNA (m): sc-39473, FGF-15 shRNA Plasmid (m): sc-39473-SH and FGF-15 shRNA (m) Lentiviral Particles: sc-39473-V.

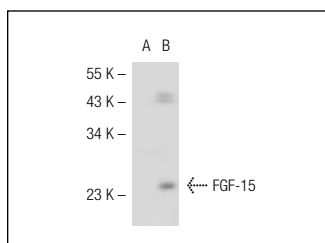
Molecular Weight of FGF-15: 25 kDa.

Positive Controls: FGF-15 (m): 293T Lysate: sc-126850.

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



FGF-15 (P-20): sc-16816. Western blot analysis of FGF-15 expression in non-transfected: sc-117752 (A) and mouse FGF-15 transfected: sc-126850 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Inagaki, T., et al. 2005. Fibroblast growth factor 15 functions as an enterohepatic signal to regulate bile acid homeostasis. *Cell Metab.* 2: 217-225.
2. Borello, U., et al. 2008. FGF15 promotes neurogenesis and opposes FGF8 function during neocortical development. *Neural Dev.* 3: 17.
3. Cases, O., et al. 2013. Cubilin, a high affinity receptor for fibroblast growth factor 8, is required for cell survival in the developing vertebrate head. *J. Biol. Chem.* 288: 16655-16670.

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
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Try **FGF-15 (D-9): sc-514647** or **FGF-15 (G-5): sc-398338**, our highly recommended monoclonal alternatives to FGF-15 (P-20).