

FGF-2 (147): sc-79

BACKGROUND

Fibroblast growth factor-1 (FGF-1), also designated acidic FGF, and fibroblast growth factor-2 (FGF-2), also designated basic FGF, are members of a family of growth factors that stimulate proliferation of cells of mesenchymal, epithelial and neuroectodermal origin. Additional members of the FGF family include the oncogenes FGF-3 (Int2) and FGF-4 (hst/Kaposi), FGF-5, FGF-6, FGF-7 (KGF), FGF-8 (AIGF), FGF-9 (GAF) and FGF-10-FGF-23. Members of the FGF family share 30-55% amino acid sequence identity and similar gene structure, and are capable of transforming cultured cells when overexpressed in transfected cells. Cellular receptors for FGFs are members of a second multigene family including four tyrosine kinases, designated Flg (FGFR-1), Bek (FGFR-L), TKF and FGFR-3.

CHROMOSOMAL LOCATION

Genetic locus: FGF2 (human) mapping to 4q27; Fgf2 (mouse) mapping to 3 B.

SOURCE

FGF-2 (147) is available as either rabbit (sc-79) or goat (sc-79-G) polyclonal affinity purified antibody raised against a peptide mapping within an internal region of FGF-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available azide-free for biological studies, sc-79 L, 200 µg/0.1 ml.

FGF-2 (147) is available conjugated to agarose (sc-79 AC), 500 µg/0.25 ml agarose in 1 ml, for IP.

Blocking peptide available for competition studies, sc-79 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FGF-2 (147) is recommended for detection of precursor and mature FGF-2 of mouse, rat, human and *Xenopus laevis* 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), 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).

FGF-2 (147) is also recommended for detection of precursor and mature FGF-2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for FGF-2 siRNA (h): sc-39446, FGF-2 siRNA (m): sc-39447, FGF-2 siRNA (r): sc-108055, FGF-2 shRNA Plasmid (h): sc-39446-SH, FGF-2 shRNA Plasmid (m): sc-39447-SH, FGF-2 shRNA Plasmid (r): sc-108055-SH, FGF-2 shRNA (h) Lentiviral Particles: sc-39446-V, FGF-2 shRNA (m) Lentiviral Particles: sc-39447-V and FGF-2 shRNA (r) Lentiviral Particles: sc-108055-V.

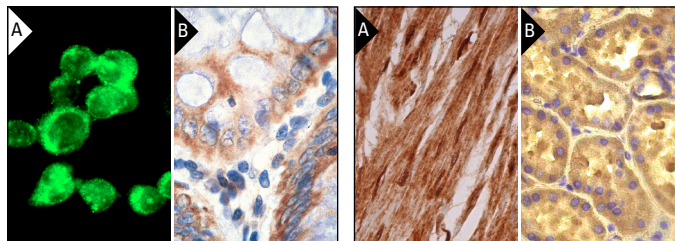
Molecular Weight of FGF-2 isoforms: 18/21/24 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

STORAGE

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

DATA



FGF-2 (147): sc-79. Immunofluorescence staining of methanol-fixed COLO 320DM cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin-fixed, paraffin-embedded human colon carcinoma tissue. Note cytoplasmic staining of epithelial cells (B).

FGF-2 (147): sc-79-G. Immunoperoxidase staining of formalin fixed, paraffin-embedded human smooth muscle tissue showing cytoplasmic and nuclear staining of smooth muscle cells (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of cells in tubules (B).

SELECT PRODUCT CITATIONS

1. Rose, K. 1994. Post-cholecystectomy symptoms after laparoscopic cholecystectomy. *Ann. R. Coll. Surg. Engl.* 76: 143.
2. Uzelac, P.S., et al. 2010. Dysregulation of leptin and testosterone production and their receptor expression in the human placenta with gestational diabetes mellitus. *Placenta* 31: 581-588.
3. Frinchi, M., et al. 2010. FGF-2/FGFR1 neurotrophic system expression level and its basal activation do not account for the age-dependent decline of precursor cell proliferation in the subventricular zone of rat brain. *Brain Res.* 1358: 39-45.
4. Peters, T., et al. 2010. Mouse model of foreign body reaction that alters the submesothelium and transperitoneal transport. *Am. J. Physiol. Renal Physiol.* 300: F283-F289.
5. Kundumani-Sridharan, V., et al. 2010. 15s-hydroxyeicosatetraenoic acid-induced angiogenesis requires Src-mediated Egr-1-dependent rapid induction of FGF-2 expression. *Blood* 115: 2105-2116.
7. Tian, X., et al. 2012. Interactions of pancreatic cancer and stellate cells are mediated by FGFR1-III isoform expression. *Hepatogastroenterology* 59: 1604-1608.

RESEARCH USE

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



Try **FGF-2 (G-2): sc-365106** or **FGF-2 (C-2): sc-74412**, our highly recommended monoclonal alternatives to FGF-2 (147). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **FGF-2 (G-2): sc-365106**.