

FGF-2 (C-2): sc-74412



The Power to Question

BACKGROUND

Fibroblast growth factor-1 (FGF-1), also designated acidic FGF, and fibroblast growth factor-2 (FGF-2), also referred to as 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 (C-2) is a mouse monoclonal antibody raised against amino acids 10-140 of FGF-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FGF-2 (C-2) is available conjugated to agarose (sc-74412 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-74412 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-74412 PE), fluorescein (sc-74412 FITC), Alexa Fluor® 488 (sc-74412 AF488), Alexa Fluor® 546 (sc-74412 AF546), Alexa Fluor® 594 (sc-74412 AF594) or Alexa Fluor® 647 (sc-74412 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-74412 AF680) or Alexa Fluor® 790 (sc-74412 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

FGF-2 (C-2) is recommended for detection of precursor and mature FGF-2 of mouse, rat, human and *Xenopus laevis* origin by Western Blotting (starting dilution 1:100, 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).

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.

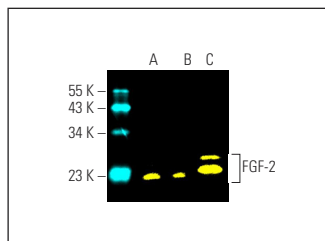
Molecular Weight of FGF-2 isoforms: 18/21/24 kDa.

Positive Controls: U-251-MG whole cell lysate: sc-364176, AN3 CA cell lysate: sc-24662 or HeLa whole cell lysate: sc-2200.

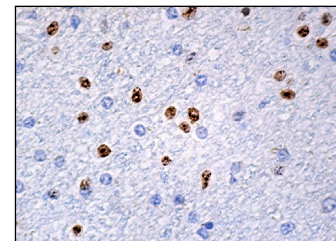
STORAGE

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

DATA



FGF-2 (C-2) Alexa Fluor® 488: sc-74412 AF488. Direct fluorescent western blot analysis of FGF-2 expression in U-251-MG (A), AN3 CA (B) and HeLa (C) whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Cruz Marker™ Molecular Weight Standards detected with Cruz Marker MW Tag-Alexa Fluor® 647: sc-516791.



FGF-2 (C-2): sc-74412. Immunoperoxidase staining of formalin fixed, paraffin-embedded human brain tissue showing nuclear staining of glial cells.

SELECT PRODUCT CITATIONS

- Lee, S.H., et al. 2013. Cytoprotective effect of dieckol on human endothelial progenitor cells (hEPCs) from oxidative stress-induced apoptosis. *Free Radic. Res.* 47: 526-534.
- Sletten, T., et al. 2014. Nucleolin regulates phosphorylation and nuclear export of fibroblast growth factor 1 (FGF-1). *PLoS ONE* 9: e90687.
- Litwin, M., et al. 2015. The role of FGF-2 in migration and tubulogenesis of endothelial progenitor cells in relation to pro-angiogenic growth factor production. *Mol. Cell. Biochem.* 410: 131-142.
- Jung, J.H., et al. 2016. CXCR2 inhibition in human pluripotent stem cells induces predominant differentiation to mesoderm and endoderm through repression of mTOR, β -catenin, and hTERT activities. *Stem Cells Dev.* 25: 1006-1019.
- Cheng, T.L., et al. 2018. Plasminogen/thrombomodulin signaling enhances VEGF expression to promote cutaneous wound healing. *J. Mol. Med.* 96: 1333-1344.
- Dong, R., et al. 2019. Temporospatial effects of acyl-ghrelin on activation of astrocytes after ischaemic brain injury. *J. Neuroendocrinol.* 31: e12767.
- Krzyscick, M.A., et al. 2020. Site-specific, stoichiometric-controlled, PEGylated conjugates of Fibroblast Growth Factor 2 (FGF2) with hydrophilic auristatin Y for highly selective killing of cancer cells overproducing Fibroblast Growth Factor Receptor 1 (FGFR1). *Mol. Pharm.* 17: 2734-2748.
- Akdag, M., et al. 2020. Proximal biotinylation based combinatory approach for isolating integral plasma membrane proteins. *J. Proteome Res.* 19: 3583-3592.

RESEARCH USE

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

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