

FGF-7 (F-9): sc-365440

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 (Int-2) 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: FGF7 (human) mapping to 15q21.2; Fgf7 (mouse) mapping to 2 F1.

SOURCE

FGF-7 (F-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 171-194 at the C-terminus of FGF-7 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FGF-7 (F-9) is available conjugated to agarose (sc-365440 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365440 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365440 PE), fluorescein (sc-365440 FITC), Alexa Fluor® 488 (sc-365440 AF488), Alexa Fluor® 546 (sc-365440 AF546), Alexa Fluor® 594 (sc-365440 AF594) or Alexa Fluor® 647 (sc-365440 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365440 AF680) or Alexa Fluor® 790 (sc-365440 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-365440 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

FGF-7 (F-9) is recommended for detection of precursor and mature FGF-7 of mouse, rat and human 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

FGF-7 (F-9) is also recommended for detection of precursor and mature FGF-7 in additional species, including equine, canine, bovine and porcine.

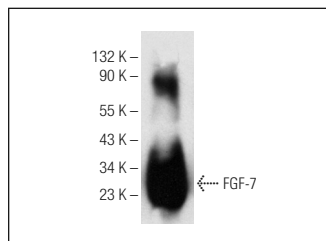
Suitable for use as control antibody for FGF-7 siRNA (h): sc-39456, FGF-7 siRNA (m): sc-39457, FGF-7 shRNA Plasmid (h): sc-39456-SH, FGF-7 shRNA Plasmid (m): sc-39457-SH, FGF-7 shRNA (h) Lentiviral Particles: sc-39456-V and FGF-7 shRNA (m) Lentiviral Particles: sc-39457-V.

Molecular Weight of FGF-7: 28 kDa.

STORAGE

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

DATA



FGF-7 (F-9): sc-365440. Western blot analysis of full length human recombinant FGF-7.

SELECT PRODUCT CITATIONS

- Gangalum, R.K., et al. 2014. Expression of the HSF4 DNA binding domain-EGFP hybrid gene recreates early childhood lamellar cataract in transgenic mice. *Invest. Ophthalmol. Vis. Sci.* 55: 7227-7240.
- Menden, H., et al. 2019. Histone deacetylase 6 regulates endothelial MyD88-dependent canonical TLR signaling, lung inflammation, and alveolar remodeling in the developing lung. *Am. J. Physiol. Lung Cell. Mol. Physiol.* 317: L332-L346.
- Pu, J., et al. 2019. FGF-7 facilitates the process of psoriasis by inducing TNF- α expression in HaCaT cells. *Acta Biochim. Biophys. Sin.* 51: 1056-1063.
- Choi, D.W., et al. 2020. Co-transplantation of tonsil-derived mesenchymal stromal cells in bone marrow transplantation promotes thymus regeneration and T cell diversity following cytotoxic conditioning. *Int. J. Mol. Med.* 46: 1166-1174.
- ZhuGe, D.L., et al. 2020. Fibroblast growth factor 2 exacerbates inflammation in adipocytes through NLRP3 inflammasome activation. *Arch. Pharm. Res.* 43: 1311-1324.
- Chen, X., et al. 2022. FGF21 promotes migration and differentiation of epidermal cells during wound healing via SIRT1-dependent autophagy. *Br. J. Pharmacol.* 179: 1102-1121.
- Mei, L., et al. 2022. Fibroblast growth factor 7 alleviates myocardial infarction by improving oxidative stress via PI3K α /AKT-mediated regulation of Nrf2 and HXX2. *Redox Biol.* 56: 102468.
- Cang, Z., et al. 2023. Screening cell-cell communication in spatial transcriptomics via collective optimal transport. *Nat. Methods.* E-published.

RESEARCH USE

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

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