# SANTA CRUZ BIOTECHNOLOGY, INC.

# FGF-10 (H-121): sc-7917



## 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. Members of the FGF family share 30-55% amino acid sequence identity, 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 FIg (FGFR-1), Bek (FGFR-L), TKF and FGFR-3.

## REFERENCES

- Moore, R., et al. 1986. Sequence, topography and protein coding potential of mouse Int-2: a putative oncogene activated by mouse mammary tumor virus. EMBO J. 5: 919-924.
- Delli Bovi, P., et al. 1987. An oncogene isolated by transfection of Kaposi's sarcoma DNA encodes a growth factor that is a member of the FGF family. Cell 50: 729-737.

#### CHROMOSOMAL LOCATION

Genetic locus: FGF10 (human) mapping to 5p12; Fgf10 (mouse) mapping to 13 D2.3.

## SOURCE

FGF-10 (H-121) is a rabbit polyclonal antibody raised against amino acids 10-130 of FGF-10 of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## **APPLICATIONS**

FGF-10 (H-121) is recommended for detection of precursor and mature FGF-10 of mouse, rat and human 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 paraffinembedded 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-10 (H-121) is also recommended for detection of precursor and mature FGF-10 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for FGF-10 siRNA (h): sc-39462, FGF-10 siRNA (m): sc-39463, FGF-10 shRNA Plasmid (h): sc-39462-SH, FGF-10 shRNA Plasmid (m): sc-39463-SH, FGF-10 shRNA (h) Lentiviral Particles: sc-39462-V and FGF-10 shRNA (m) Lentiviral Particles: sc-39463-V.

Molecular Weight of FGF-10: 19 kDa.

Positive Controls: human malignant glioma tissue extract.

## STORAGE

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

## DATA





Western blot analysis of human recombinant FGF-10 (**A**,**B**). Antibodies tested include FGF-10 (C-17): sc-7375 (**A**) and FGF-10 (H-121): sc-7917 (**B**). FGF-10 (H-121): sc-7917. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic and nuclear staining of cells in seminiferous tubes.

#### SELECT PRODUCT CITATIONS

- Suzuki, K., et al. 2000. Defective terminal differentiation and hypoplasia of the epidermis in mice lacking the FGF-10 gene. FEBS Lett. 481: 53-56.
- 2. Palmieri, C., et al. 2003. Fibroblast growth factor 7, secreted by breast fibroblasts, is an interleukin-1 $\beta$ -induced paracrine growth factor for human breast cells. J. Endocrinol. 177: 65-81.
- Theodorou, V. 2004. FGF-10 is an oncogene activated by MMTV insertional mutagenesis in mouse mammary tumors and overexpressed in a subset of human breast carcinomas. Oncogene 23: 6047-6055.
- 4. Kovacs, D., et al. 2005. Immunohistochemical analysis of keratinocyte growth factor and fibroblast growth factor 10 expression in psoriasis. Exp. Dermatol. 14: 130-137.
- Fritz, T., et al. 2006. Low-intensity exercise increases skeletal muscle protein expression of PPARδ and UCP3 in type 2 diabetic patients. Diabetes Metab. Res. Rev. 22: 492-498.
- 6. Cui, Y., et al. 2008. Effect of mammogenic hormones on the expression of FGF-7, FGF-10 and their receptor in mouse mammary gland. Sci. China, C, Life Sci. 51: 711-717.

#### **RESEARCH USE**

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

#### PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

**MONOS** Satisfation Guaranteed Try **FGF-10 (3C7): sc-293208**, our highly recommended monoclonal aternative to FGF-10 (H-121).