SANTA CRUZ BIOTECHNOLOGY, INC.

FGF-7 (H-73): sc-7882

SANTA CRUZ BIOTECHNOLOGY

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 (Int-2) 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 Flg (FGFR-1), Bek (FGFR-L), TKF and FGFR-3.

REFERENCES

1. 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.
2. 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: FGF7 (human) mapping to 15q21.2; Fgf7 (mouse) mapping to 2 F1.

SOURCE

FGF-7 (H-73) is a rabbit polyclonal antibody raised against amino acids 32-104 of FGF-7 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.

APPLICATIONS

FGF-7 (H-73) is recommended for detection of precursor and mature FGF-7 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 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-7 (H-73) is also recommended for detection of precursor and mature FGF-7 in additional species, including equine, canine, bovine, porcine and avian.

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.

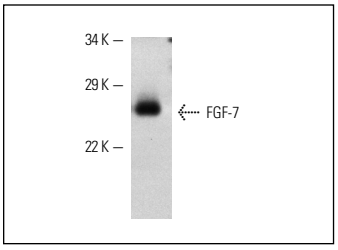
Molecular Weight of FGF-7: 28 kDa.

Positive Controls: mouse ovary extract: sc-2404.

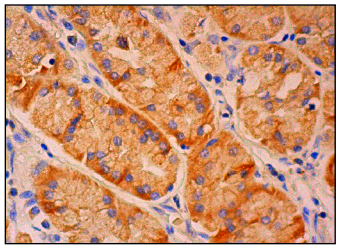
STORAGE

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

DATA



FGF-7 (H-73): sc-7882. Western blot analysis of human recombinant FGF-7.



FGF-7 (H-73): sc-7882. Immunoperoxidase staining of formalin fixed, paraffin-embedded human upper stomach tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Kezele, P., et al. 2005. Keratinocyte growth factor acts as a mesenchymal factor that promotes ovarian primordial to primary follicle transition. Biol. Reprod. 73: 967-973.
2. Chun, S.Y., et al. 2007. Identification and characterization of bioactive factors in bladder submucosa matrix. Biomaterials 28: 4251-4256.
3. Abdel-Hakeem, A.K., et al. 2008. Mechanisms of impaired nephrogenesis with fetal growth restriction: altered renal transcription and growth factor expression. Am. J. Obstet. Gynecol. 199: 252.e1-252.e7.
4. Cui, Y., et al. 2008. Effect of mammogenic hormones on the expression of FGF7, FGF10 and their receptor in mouse mammary gland. Sci. China, C, Life Sci. 51: 711-717.
5. Terauchi, A., et al. 2010. Distinct FGFs promote differentiation of excitatory and inhibitory synapses. Nature 465: 783-787.
6. d'Alessandro, F., et al. 2010. Paracrine loops of keratinocyte stimulation in cholesteatoma tissue: an immunofluorescence, transmission electron microscopy, and molecular study. Otol. Neurotol. 31: 1163-1169.
7. Blazek, D., et al. 2011. The Cyclin K/Cdk12 complex maintains genomic stability via regulation of expression of DNA damage response genes. Genes Dev. 25: 2158-2172.

RESEARCH USE

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