

FGF-7 (hBA-163): sc-4613

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.

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CHROMOSOMAL LOCATION

Genetic locus: FGF7 (human) mapping to 15q15-21q21.1; Fgf7 (mouse) mapping to 2 F-G.

SOURCE

FGF-7 (hBA-163) is produced in *E. coli* as 19 kDa biologically active protein corresponding to 163 amino acids of FGF-7 of human origin.

PRODUCT

FGF-7 (hBA-163) is purified from bacterial lysates (>98%); supplied as 10 µg purified protein.

BIOLOGICAL ACTIVITY

FGF-7 (hBA-163) is biologically active as determined by the dose-dependent stimulation of KGF-responsive BaF3 indicator cells.

Expected ED₅₀: 2.0 ng/ml.

Specific Activity: Greater than 1 x 10⁵ units/mg.

RECONSTITUTION

In order to avoid freeze/thaw damaging of the active protein, dilute protein when first used to desired working concentration. Either a sterile filtered standard buffer (such as 50mM TRIS or 1X PBS) or water can be used for the dilution. Store any thawed aliquot in refrigeration at 2° C to 8° C for up to four weeks, and any frozen aliquot at -20° C to -80° C for up to one year. It is recommended that frozen aliquots be given an amount of standard cryopreservative (such as Ethylene Glycol or Glycerol 5-20% v/v), and refrigerated samples be given an amount of carrier protein (such as heat inactivated FBS or BSA to 0.1% v/v) or non-ionic detergent (such as Triton X-100 or Tween 20 to 0.005% v/v), to aid stability during storage.

STORAGE

Store desiccated at -20° C; stable for one year from the date of shipment.

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.