SANTA CRUZ BIOTECHNOLOGY, INC.

FGF-18 (hBA-182): sc-4582

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. FGF-18 stimulates proliferation in a number of tissues, most notably the liver and small intestine, and is able to induce neurite outgrowth in PC12 cells.

REFERENCES

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SOURCE

FGF-18 (hBA-182) is produced in *E. coli* as 21.2 kDa biologically active protein corresponding to 182 amino acids of FGF-18 of human origin.

PRODUCT

FGF-18 (hBA-182) is purified from bacterial lysates (>98%); supplied as 50 µg purified protein.

BIOLOGICAL ACTIVITY

FGF-18 (hBA-182) is biologically active as determined by the dose-dependent stimulation of thymidine uptake by BaF3 cells expressing FGF receptors.

Expected ED_{50}: <0.5 ng/ml.

Specific Activity: Greater than 2 x 10^6 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.