

Active FGF-BP-1, Human Recombinant

02/21

CATALOG NO:	P1707-25 25 µg
ALTERNATE NAMES:	17 kDa heparin-binding growth factor-binding protein; FGFBP; FGF-BP; FGFBP1; FGF-BP1; FGFBP-1; FGF-binding protein 1; fibroblast growth factor binding protein 1; fibroblast growth factor-binding protein 1; HBp17; HBP17; 17 kDa HBGF-binding protein; heparin-binding growth factor binding protein
MOL. WT.	23.9 kDa
NCBI GENE ID:	9982
ACCESSION NO.:	Q14512
PURITY:	≥ 95% by SDS-PAGE gel and HPLC analyses
SOURCE:	<i>E.coli</i>
AMINO ACID SEQUENCE:	MKKKVKNGLNH SKVVSEQKDT LGNTQIKQKS RPNKNGKFVT KDQANCRWAA TEQEEGISLK VECTQLDHEF SCVFAGNPTS CLKLKDENVY WKQVARNLRS QKDICRYSKT AVKTRVCRKD FPESLKLVS STLFGNTKPR KEKTEMSPRE HIKGKETTPS SLAVTQTMAT KAPECVEDPD MANQRKTALE FCGETWSSLC TFFLSIVQDT SC
FORM:	Lyophilized protein powder
RECONSTITUTION:	Reconstitute to desired concentration using sterile water.
BIOLOGICAL ACTIVITY:	Determined by the dose-dependent stimulation of thymidine uptake by BaF3 cells expressing FGF receptors. The expected ED50 for this effect is 1.5-3.0 µg/ml.
STORAGE CONDITIONS:	Store at -20 °C to -80 °C. After reconstitution, divide into small aliquots and store at -20 °C to -80 °C. Avoid repeated freeze-thaw cycles.
DESCRIPTION:	Fibroblast growth factor binding protein 1 (FGF-BP-1) is a secreted glycoprotein, which contains both a heparin-binding domain and a distinct FGF-binding region, that is shed into circulation where it acts as a chaperone molecule for FGFs, most notably FGF-acidic and FGF-basic. Once secreted, FGF-BP-1 can bind FGFs in a reversible manner to mobilize them from inactive storage on heparan sulfate proteoglycans in the extracellular matrix, and deliver them to high affinity receptors on the cell surface where they can exert biological function, all the while protecting against proteolytic degradation. Expressed within the squamous epithelium, FGF-BP-1 functions synergistically with FGFs as a mitogen for keratinocytes and an antagonist for angiogenesis under normal physiological conditions and instances of tissue repair, while also acting as an angiogenic switch for the malignant progression of epithelial cells. First discovered at elevated levels within A431 human epidermoid carcinoma cells, FGF-BP-1 is also expressed at elevated levels in many squamous cell carcinomas and tumors where it has been shown to be a rate-determining factor, interacting with the heparan sulfate proteoglycan perlecan to potentiate neovascularization of tumor masses.
RELATED PRODUCTS:	<ul style="list-style-type: none"> FGF-1/FGF-acidic, Human Recombinant (Cat. No. 4034) Human CellExp™ FGF-2/FGF-basic, Human Recombinant (Cat. No. 6448) FGF-2 Antibody (Cat. No. 5039) FGF-2/FGF-basic, Human Recombinant (Cat. No. 4037) FGF-1 Antibody (Cat. No. 5034)

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