Data Sheet (Cat.No.TMPY-02838)

TargetMol

FGFBP3 Protein, Human, Recombinant (His)

General Information

Synonyms:	C10orf13;FGF-BP3;fibroblast growth factor binding protein 3
Protein Construction:	A DNA sequence encoding the human FGFBP3 (Met 1-Gly 258) (Q8TAT2) was expressed, with a C-terminal polyhistidine tag. Predicted N terminal: Arg 27
Species:	Human
Expression Host:	Baculovirus Insect Cells
Accession:	Q8TAT2
Molecular Weight:	26.4 kDa (predicted); 33 kDa (reducing condition, due to glycosylation)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 87 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing 20 mM Tris, 500 mM NaCl, 10% gly, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

FGFBP3 is a member of the fibroblast growth factor-binding protein family. Members of this family binds and activates FGF-1 and FGF-2, thereby contributing to tumor angiogenesis. Fibroblast growth factors (FGFs) are important regulators of cell migration, proliferation and differentiation, e.g., during embryogenesis and wound healing, and under several pathological conditions including tumor growth and tumor angiogenesis. Expression of FGF-BP increases after injury to murine and human skin, in particular in keratinocytes. This upregulation is most

likely achieved by major keratinocyte mitogens present at the wound site. FGFBP3 is a positive regulator of fibroblast growth factor receptor signaling pathway and vascular permeability. It interacts with 2,3,7,8-tetrachlorodibenzodioxine, benzopyrene and valproic acid. FGFBP3 also exhibits fibroblast growth factor binding (orthology) and heparin binding (orthology).

Reference

Abuharbeid S, et al. (2006) The fibroblast growth factor-binding protein FGF-BP. Int J Biochem Cell Biol. 38(9): 1463-8.

Lange LG, et al. (1976) Human liver alcohol dehydrogenase: purification, composition, and catalytic features. Biochemistry. 15(21):4687-93.

Czubayko F, et al. (1997) A secreted FGF-binding protein can serve as the angiogenic switch in human cancer. Nat Med. 3(10):1137-40.