Data Sheet (Cat.No.TMPY-03847)

TargetMol

FRZB Protein, Human, Recombinant (His)

General Information

Synonyms:	frizzled-related protein;FRITZ;OS1;SFRP3;FRZB-PEN;FRP-3;FRE;FZRB;FRZB1;FRZB-1;SRFP3;hFIZ
Protein Construction:	A DNA sequence encoding the human FRZB (NP_001454.2) (Ala32-Asn325) was expressed with a C-terminal polyhistidine tag. Predicted N terminal: Ala 32
Species:	Human
Expression Host:	HEK293 Cells
Accession:	D9ZGF6
Molecular Weight:	34.5 kDa (predicted); 41 kDa (reducing conditions)

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:	> 85 % 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 PBS, 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

FRZB also known as sFRP-3, is a secreted protein containing a domain similar to the putative Wnt-binding region of the frizzled family of transmembrane receptors. FRZB is widely expressed in adult mammalian tissues. In the Xenopus gastrula, FRZB is regulated as a typical Spemann organizer component. FRZB also functions as a competitor for the cell-surface G-protein receptor Frizzled. It is espically important in embryonic development.

Defects in FRZB gene can cause female-specific osteoarthritis (OA) susceptibility. FRZB may serve an important role in determining hip shape and may modify the relationship between hip shape and OA.

Reference

Hoang B., et al.,(1996), Primary structure and tissue distribution of FRZB, a novel protein related to Drosophila frizzled, suggest a role in skeletal morphogenesis. J. Biol. Chem. 271:26131-26137.

Mayr T., et al., (1997), Fritz: a secreted frizzled-related protein that inhibits Wnt activity.Mech. Dev. 63:109-125.

Leyns L., et al.,(1997), Frzb-1 is a secreted antagonist of Wnt signaling expressed in the Spemann organizer.Cell 88:747-756.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481