Data Sheet (Cat.No.TMPY-03851)

TargetMol

BPIFB1 Protein, Human, Recombinant (His)

General Information

Synonyms:	LPLUNC1;BPI fold containing family B, member 1;C20orf114
Protein Construction:	A DNA sequence encoding the human BPIFB1 (AAH08429.1) (Met1-Gln484) was expressed with a polyhistidine tag at the C-terminus. Predicted N terminal: Thr 22
Species:	Human
Expression Host:	HEK293 Cells
Accession:	AAH08429.1
Molecular Weight:	51.7 kDa (predicted); 53 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:	> 95 % 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

BPIFB1, also known as LPLUNC1, belongs to the BPI/LBP/Plunc superfamily, plunc family. BPIFB1 may be involved in the innate immune response to bacterial exposure in the mouth, nasal cavities, and lungs. BPIFB1 is expressed in the upper respiratory tract and oral cavity, which may function in host defence. The expression of BPIF proteins is associated with CF lung disease in humans and mice. It is unclear if this elevation of protein production, which results from phenotypic alteration of the cells within the diseased epithelium, plays a role in the pathogenesis of

the disease. BPIFB1 is an abundant, secreted product of goblet cells and minor mucosal glands of the respiratory tract and oral cavity and suggest that the protein functions in the complex milieu that protects the mucosal surfaces in these locations.

Reference

Bingle C.D., et al.,(2002), PLUNC: a novel family of candidate host defence proteins expressed in the upper airways and nasopharynx. Hum. Mol. Genet. 11:937-943.

Clark H.F., et al., (2003), The secreted protein discovery initiative (SPDI), a large-scale effort to identify novel human secreted and transmembrane proteins: a bioinformatics assessment.Genome Res. 13:2265-2270.

Ota T., et al.,(2004), Complete sequencing and characterization of 21,243 full-length human cDNAs.Nat. Genet. 36: 40-45.

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