# Data Sheet (Cat.No.TMPY-03121)

TargetMol

## BPIFA2 Protein, Human, Recombinant (His)

### General Information

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|---|---|
| Synonyms: | SPLUNC2;bA49G10.1;BPI fold containing family A, member 2;PSP;C20orf70 |
| Protein Construction: | A DNA sequence encoding the human C20orf70 (Q96DR5) (Met1-Ile249) was expressed with a polyhistidine tag at the C-terminus. Predicted N terminal: Glu 19 |
| Species: | Human |
| Expression Host: | HEK293 Cells |
| Accession: | Q96DR5 |
| Molecular Weight: | 26.5 kDa (predicted); 35 kDa (reducing conditions) |

### QC Testing

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| 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

C20orf70 belongs to the BPI/LBP/Plunc superfamily, Plunc family. PLUNC family is comprised by mucosal secretory proteins that are predicted to be structurally similar to lipid-binding and host-defense proteins including bactericidal/permeability-increasing protein and lipopolysaccharide-binding protein. C20orf70 can be detected in submandibular gland. C20orf70 gene contains 9 distinct gt-ag introns. Transcription produces 6 different mRNAs, 4 alternatively spliced variants and 2 unspliced forms. There are 2 probable alternative promotors, 3 non

overlapping alternative last exons and 4 validated alternative polyadenylation sites. The mRNAs appear to differ by truncation of the 3' end. 80 bp of this gene are antisense to spliced gene glopa, raising the possibility of regulated alternate expression. C20orf70 is expected to have molecular function (lipid binding) and to localize in extracellular region. It is a salivary protein of unknown function.

Reference

Lamesch P,et al.(2007) hORFeome v3.1: a resource of human open reading frames representing over 10,000 human genes. Genomics. 89(3):307-15.

Ota T,et al.(2004) Complete sequencing and characterization of 21,243 full-length human cDNAs. Nat Genet. 36(1): 40-5.

Alanen HI,et al.(2006) ERp27, a new non-catalytic endoplasmic reticulum-located human protein disulfide isomerase family member, interacts with ERp57. J Biol Chem. 281(44):33727-38.



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