Data Sheet (Cat.No.TMPY-03266)

TargetMol

COL4A3BP Protein, Human, Recombinant (His & GST)

General Information

Synonyms:	CERTL;GPBP;collagen, type IV, alpha 3 (Goodpasture antigen) binding protein;CERT;STARD11; collagen, type IV, α3 (Goodpasture antigen) binding protein
Protein Construction:	A DNA sequence encoding the human COL4A3BP (Q9Y5P4-1) (Met1-Phe598) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus. Predicted N terminal: Met
Species:	Human
Expression Host:	Baculovirus Insect Cells
Accession:	Q9Y5P4-1
Molecular Weight:	95.8 kDa (predicted); 96 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:	> 90 % 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, pH 7.4, 10% glycerol. 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

COL4A3BP is a member of the StarD2 subfamily. It contains a pleckstrin homology domain at its amino terminus and a START domain towards the end of the molecule. COL4A3BP has a lipid-binding domain that mediates intracellular trafficking of ceramide in a non-vesicular manner. One isoform of COL4A3BP is also involved in ceramide intracellular transport. COL4A3BP specifically phosphorylates the N-terminal region of the non-

collagenous domain of the alpha 3 chain of type IV collagen, known as the Goodpasture antigen. An autoimmune response directed at this antigen can cause goodpasture disease.

Reference

Rual JF,et al. (2005) Towards a proteome-scale map of the human protein-protein interaction network. Nature. 437 (7062):1173-8.

Granero F,et al. (2005) A human-specific TNF-responsive promoter for Goodpasture antigen-binding protein. FEBS J. 272(20):5291-305.

Longo I,et al. (2006) Autosomal recessive Alport syndrome: an in-depth clinical and molecular analysis of five families. Nephrol Dial Transplant. 21(3):665-71.

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