Data Sheet (Cat.No.TMPK-01153)

TargetMol

PLVAP Protein, Human, Recombinant (His)

General Information

Synonyms:	PV1;FELS
Protein Construction:	Tyr49-Gly442
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q9BX97
Molecular Weight:	45.97 kDa (predicted). Due to glycosylation, the protein migrates to 50-70 kDa based on Tris-Bis PAGE result.

QC Testing

Biological Activity:	Activity has not been tested. 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 Tris-Bis 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, 200 mM L-arginine (pH 7.4). Typically, 8% trehalose is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

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

Plasmalemma vesicle-associated protein (PLVAP, also called PV-1) is the only protein that forms endothelial diaphragms. PLVAP expression is very low in the normal blood-retinal barrier; however, pathological factors such as high glucose and vascular endothelial growth factor (VEGF) induce its expression, leading to the exacerbation of cellular permeability. Because the new blood vessels are fragile and leaky, PLVAP could possibly be considered

a therapeutic target against retinovascular diseases.

Reference

Nakagami Y, et al. An anti-PLVAP antibody suppresses laser-induced choroidal neovascularization in monkeys. Eur J Pharmacol. 2019 Jul 5;854:240-246. doi: 10.1016/j.ejphar.2019.04.035. Epub 2019 Apr 23. PMID: 31026444.

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