Human Podoplanin / PDPN Protein, His Tag (SPR verified)

Catalog # PON-H52H3

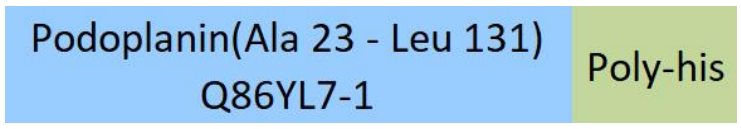
Synonym

Podoplanin,PDPN,Gp36

Source

Human Podoplanin, His Tag(PON-H52H3) is expressed from human 293 cells (HEK293). It contains AA Ala 23 - Leu 131 (Accession # Q86YL7-1).
Predicted N-terminus: Ala 23

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 13.0 kDa. The protein migrates as 20 kDa and 27-45 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.1 EU per μg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

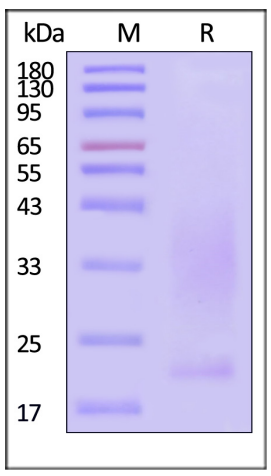
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

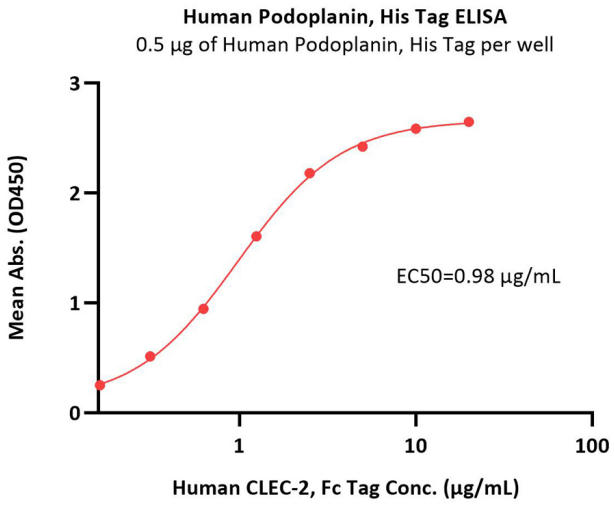
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



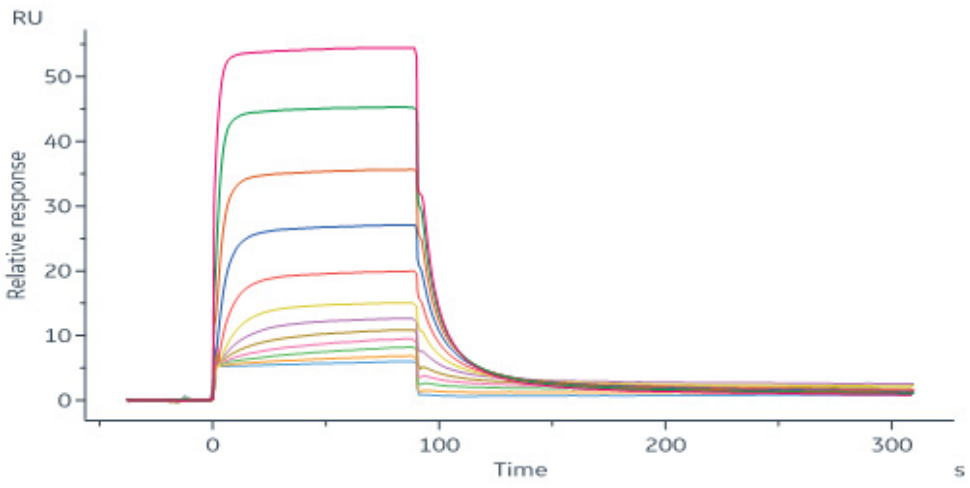
Human Podoplanin, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



Immobilized Human Podoplanin, His Tag (Cat. No. PON-H52H3) at 5 μg/mL (100 μL/well) can bind Human CLEC-2, Fc Tag (Cat. No. CL2-H5254) with a linear range of 0.313-5 μg/mL (QC tested).

Bioactivity-SPR



Human Podoplanin, His Tag (Cat. No. PON-H52H3) immobilized on CM5 Chip can bind Human CLEC-2, Fc Tag (Cat. No. CL2-H5254) with an affinity constant of 0.495 μM as determined in a SPR assay (Biacore 8K) (QC tested).

Background

Podoplanin (PDPN) is a type I transmembrane mucin-like glycoprotein expressed in the lymphatic endothelium. It is overexpressed in several solid tumors, such as squamous cell carcinoma, malignant mesothelioma, Kaposi sarcoma, angiosarcoma, testicular seminoma, and brain tumors. PDPN expression is associated with malignant progression, epithelial–mesenchymal transition, and metastasis.