Biotinylated Human Cadherin-6 / KCAD / CDH6 Protein, His,Avitag™ (MALS verified)

Catalog # CA6-H82E3

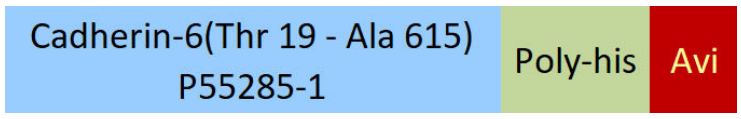
Synonym

CDH6,CAD6,KCAD,K-cadherin,Cadherin-6

Source

Biotinylated Human Cadherin-6 Protein, His,Avitag(CA6-H82E3) is expressed from human 293 cells (HEK293). It contains AA Thr 19 - Ala 615 (Accession # P55285-1).
Predicted N-terminus: Thr 19

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 70.0 kDa. The protein migrates as 53 kDa, 65 kDa and 80-95 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>85% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

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

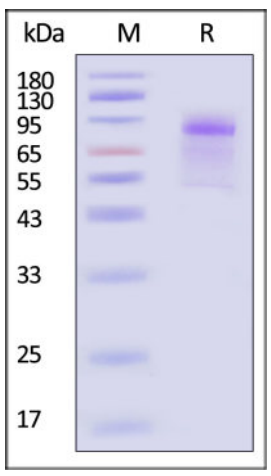
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

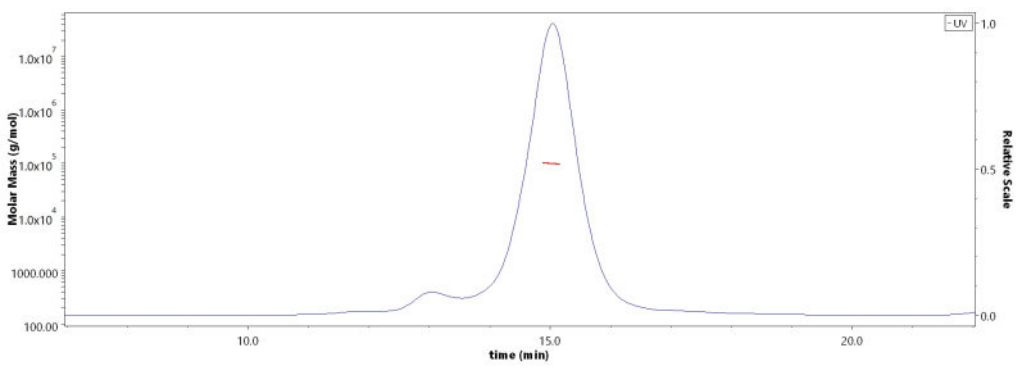
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



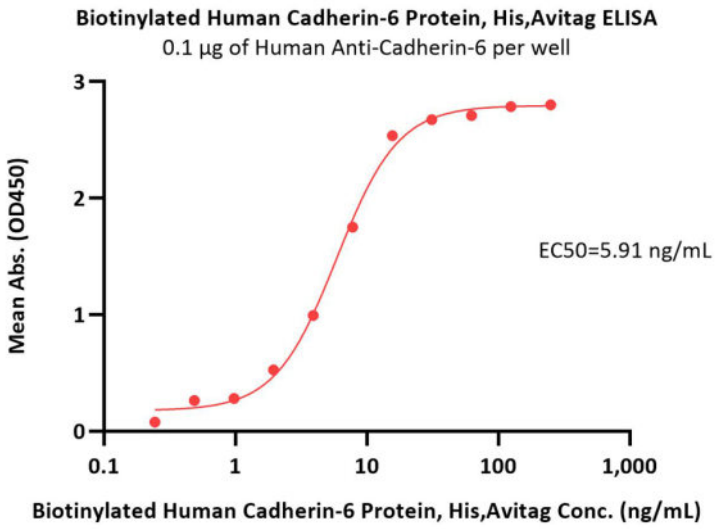
Biotinylated Human Cadherin-6 Protein, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 85% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS

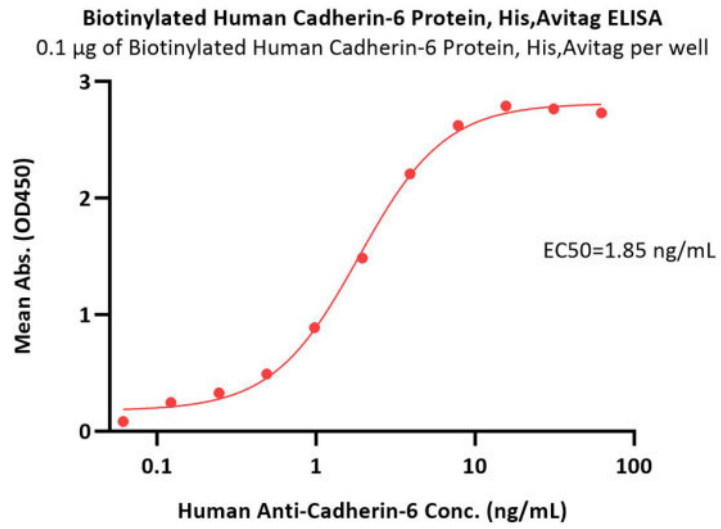


The purity of Biotinylated Human Cadherin-6 Protein, His,Avitag (Cat. No. CA6-H82E3) is more than 90% and the molecular weight of this protein is around 75-100 kDa verified by SEC-MALS.
Report

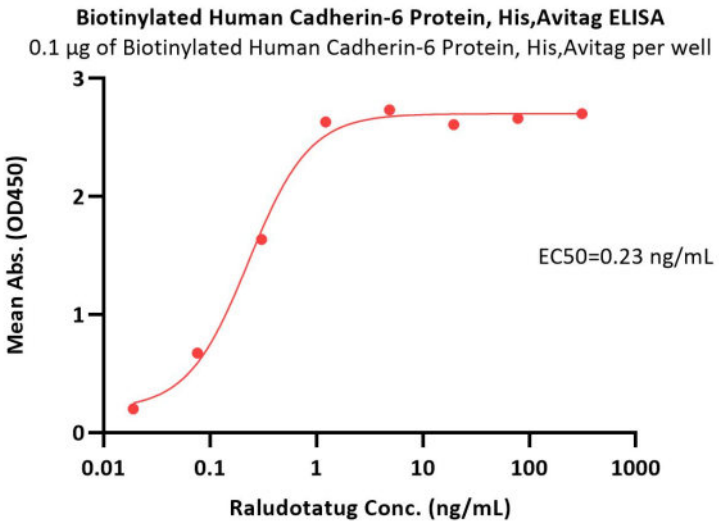
Bioactivity-ELISA



Immobilized Human Anti-Cadherin-6 at 1 μg/mL (100 μL/well) can bind Biotinylated Human Cadherin-6 Protein, His,Avitag (Cat. No. CA6-H82E3) with a linear range of 0.2-16 ng/mL (QC tested).



Immobilized Biotinylated Human Cadherin-6 Protein, His,Avitag (Cat. No. CA6-H82E3) at 1 μg/mL (100 μL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μg/well) plate can bind Human Anti-Cadherin-6 with a linear range of 0.1-4 ng/mL (Routinely tested).



Immobilized Biotinylated Human Cadherin-6 Protein, His,Avitag (Cat. No. CA6-H82E3) at 1 μg/mL (100 μL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μg/well) plate can bind Raludotatug with a linear range of 0.02-1 ng/mL (Routinely tested).

Background

Cadherin-6 (CDH6) is also known as Kidney cadherin (K-cadherin or KCAD), is a a type II classical cadherin from the cadherin superfamily. Cadherins are calcium-dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types. CDH6 / KCAD contains five cadherin domains. CDH6 is highly expressed in brain, cerebellum, and kidney. Lung, pancreas, and gastric mucosa show a weak expression and also expressed in certain liver and kidney carcinomas.

Clinical and Translational Updates