

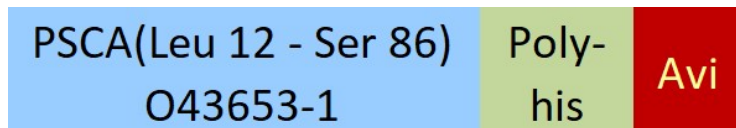
Synonym

PSCA,UNQ206,PRO232

Source

Biotinylated Human PSCA, His,Avitag(PSA-H82E3) is expressed from human 293 cells (HEK293). It contains AA Leu 12 - Ser 86 (Accession # [O43653-1](#)).

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 12.1 kDa. The protein migrates as 20-30 kDa 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

>90% 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

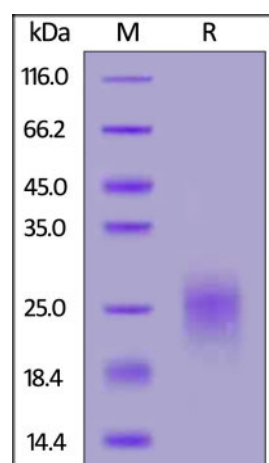
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

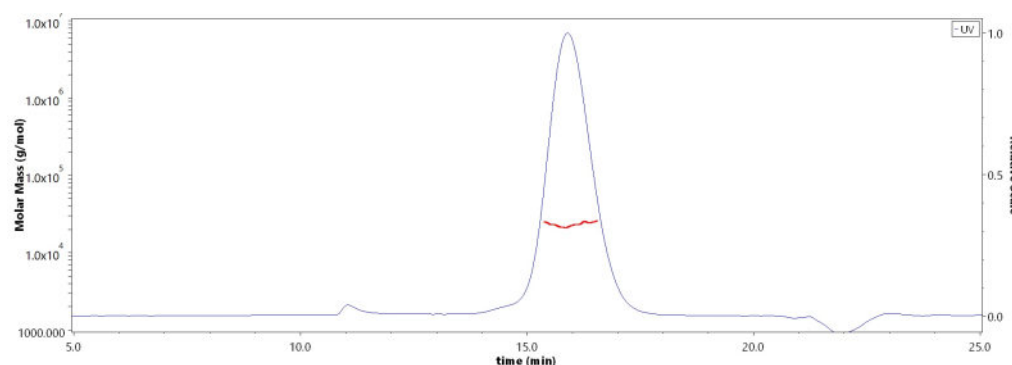
SDS-PAGE



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

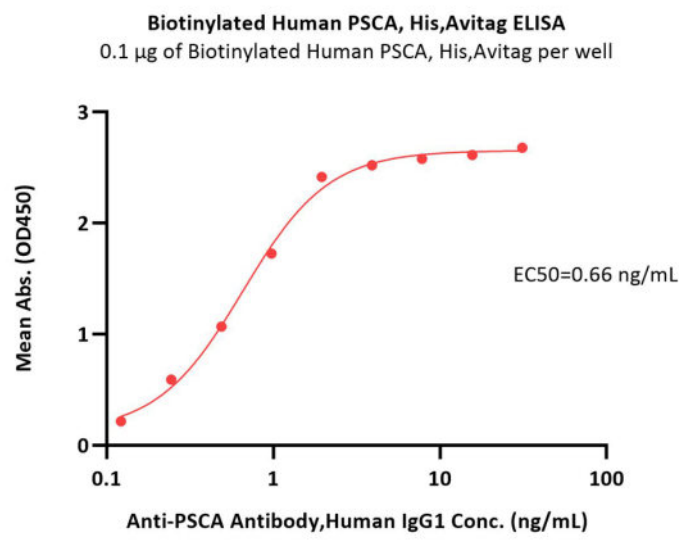
Bioactivity-ELISA

SEC-MALS



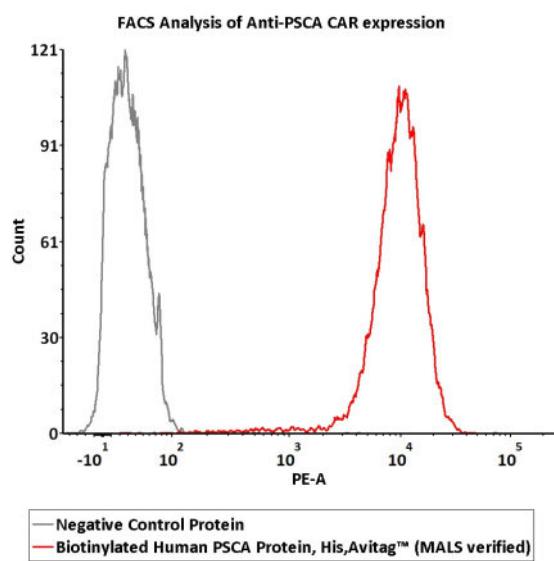
The purity of Biotinylated Human PSCA, His,Avitag (Cat. No. PSA-H82E3) is more than 90% and the molecular weight of this protein is around 18-25 kDa verified by SEC-MALS.

[Report](#)



Immobilized Biotinylated Human PSCA, His,Avitag (Cat. No. PSA-H82E3) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 µg/well) plate can bind Anti-PSCA Antibody, Human IgG1 with a linear range of 0.1-2 ng/mL (QC tested).

Bioactivity-FACS



2e5 of anti-PSCA CAR-293 cells were stained with 100 µL of 3 µg/mL of Biotinylated Human PSCA, His,Avitag (Cat. No. PSA-H82E3) and negative control protein respectively, washed and then followed by PE-SA antibody and analyzed with FACS (Routinely tested).

Background

The Prostate stem cell antigen (PSCA) is a glycosylphosphatidylinositol (GPI)-anchored protein, plays an important role in tumorigenesis. The prostate stem cell antigen (PSCA) gene, which encodes a prostate-specific antigen (PSA), was identified as a gene involved in cell adhesion and proliferation. PSCA may be involved in the regulation of cell proliferation. Has a cell-proliferation inhibition activity in vitro. May act as a modulator of nicotinic acetylcholine receptors (nAChRs) activity. In vitro inhibits nicotine-induced signaling probably implicating alpha-3:beta-2- or alpha-7-containing nAChRs.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.