

Synonym

CA125,CA-125,CA125MUC-16,FLJ14303,MUC16,mucin 16,mucin-16

Source

Human CA125 (13810-14451), His Tag(CA5-H52H6) is expressed from human 293 cells (HEK293). It contains AA Pro 13810 - Pro 14451 (Accession # Q8WXI7-1).

Predicted N-terminus: Pro 13810

Molecular Characterization

CA125(Pro 13810 - Pro 14451) Q8WXI7-1

Poly-his

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 73.7 kDa. The protein migrates as 90-116 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from $0.22~\mu m$ 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

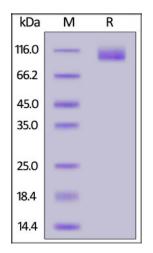
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

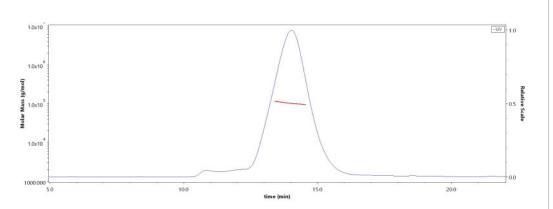
SDS-PAGE



Human CA125 (13810-14451), His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

SEC-MALS



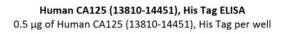
The purity of Human CA125 (13810-14451), His Tag (Cat. No. CA5-H52H6) is more than 90% and the molecular weight of this protein is around 85-115 kDa verified by SEC-MALS.

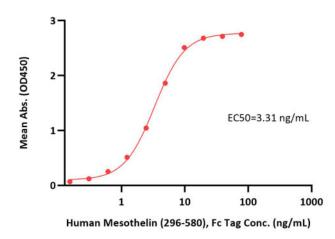
Report

Human CA125 / MUC16 (13810-14451) Protein, His Tag (MALS verified)



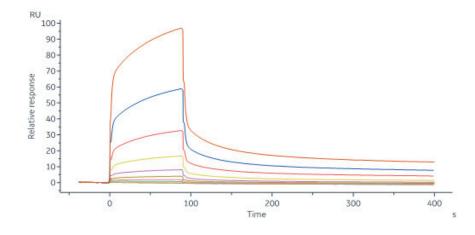






Immobilized Human CA125 (13810-14451), His Tag (Cat. No. CA5-H52H6) at 5 μ g/mL (100 μ L/well) can bind Human Mesothelin (296-580), Fc Tag (Cat. No. MSN-H5253) with a linear range of 0.2-10 ng/mL (QC tested).

Bioactivity-SPR



Human Mesothelin (296-580), His Tag, premium grade (Cat. No. MSN-H522a) immobilized on CM5 Chip can bind Human CA125 (13810-14451), His Tag (Cat. No. CA5-H52H6) with an affinity constant of 1.82 μM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

The CA125, also known as the MUC16, is a mucin protein that may be found in type I transmembrane or secreted forms that are used monitor the progress of epithelial ovarian cancer therapy. The CA 125 molecule is almost certainly a glycoprotein with a predominance of O-linkages. It is heterogeneous with regard to both size and charge, most likely due to continuous deglycosylation of side chains during its life-span in bodily fluids. It exists as a very large complex (perhaps as much as 4 million daltons) under natural conditions.

Clinical and Translational Updates

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