Human Melanotransferrin / CD228 Protein, His Tag (MALS verified)

Catalog # MEN-H5223

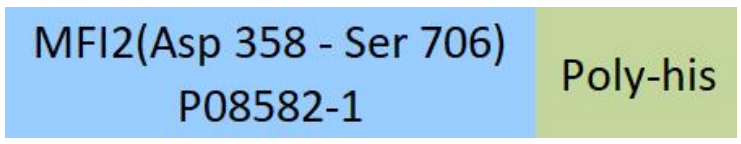
Synonym

Melanotransferrin,CD228,MFI2,MAP97,MELTF

Source

Human Melanotransferrin, His Tag(MEN-H5223) is expressed from human 293 cells (HEK293). It contains AA Asp 358 - Ser 706 (Accession # P08582-1). Predicted N-terminus: Asp 358

Molecular Characterization



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

The protein has a calculated MW of 39.3 kDa. The protein migrates as 45 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

>95% 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

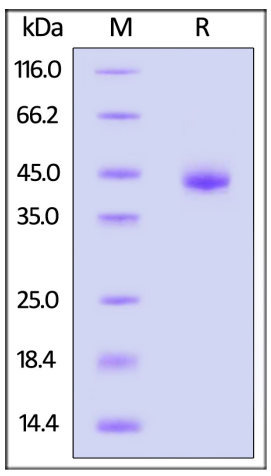
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

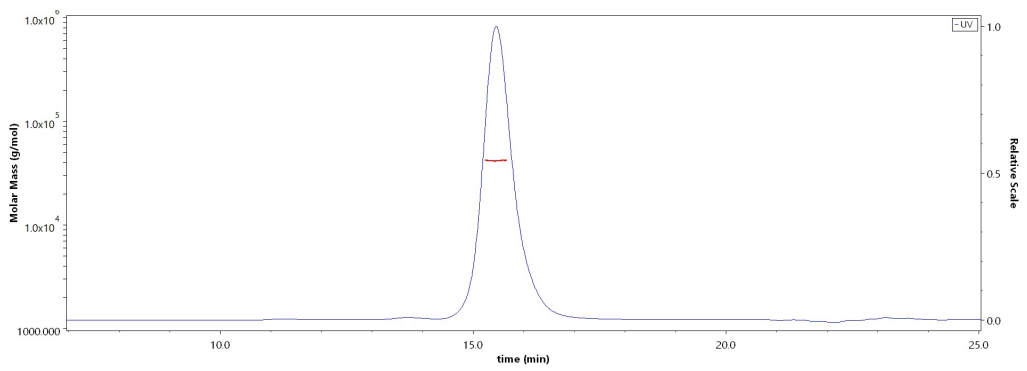
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human Melanotransferrin, 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%.

SEC-MALS



The purity of Human Melanotransferrin, His Tag (Cat. No. MEN-H5223) is more than 95% and the molecular weight of this protein is around 38-48 kDa verified by SEC-MALS.
Report

Background

Melanotransferrin (MTF), also known as CD228, P97, MELTF and MFI2, is a cell-surface glycoprotein found on melanoma cells. The protein shares sequence similarity and iron-binding properties with members of the transferrin superfamily. Involved in iron cellular uptake. Seems to be internalized and then recycled back

to the cell membrane. Binds a single atom of iron per subunit. Could also bind zinc. MTF expression is low in normal tissues but high in tumor and embryonic tissues. In melanoma MTF is associated with tumor metastasis and angiogenesis and upregulated in lung cancer tissue and cell lines. In the brain MTF is expressed in capillary endothelium but also in the reactive microglia associated with senile plaques in Alzheimer's disease (AD).