

# Human MDL-1/CLEC5A Protein

Cat. No. CLE-HM25A

## Description

<b>Source</b>	Recombinant Human MDL-1/CLEC5A Protein is expressed from HEK293 with hFc tag at the N-Terminus. It contains Tyr26-Lys188.
<b>Accession</b>	Q9NY25-1
<b>Molecular Weight</b>	The protein has a predicted MW of 46 kDa. Due to glycosylation, the protein migrates to 63-70 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 0.1 EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

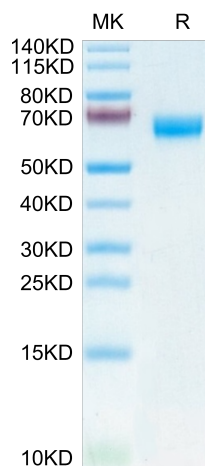
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 24 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

In *C. elegans*, increased lifespan in daf-2 insulin/IGF-1 receptor mutants is accompanied by up-regulation of the MDL-1 Mad basic helix-loop-helix leucine zipper transcription factor. MDL-1, like its mammalian orthologs, is an inhibitor of cell proliferation and growth that slows progression of an age-related pathology in *C. elegans* (uterine tumors). In addition, intestine-limited rescue of mdl-1 increased lifespan but not to wild type levels. Thus, mdl-1 likely acts both in the intestine and the germline to influence age-related mortality.

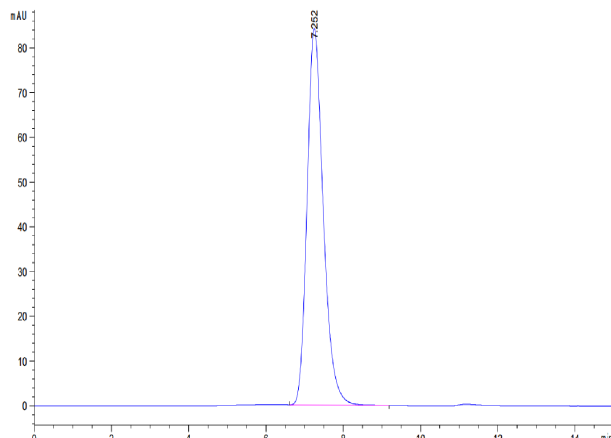
## Assay Data

### Bis-Tris PAGE



Human MDL-1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



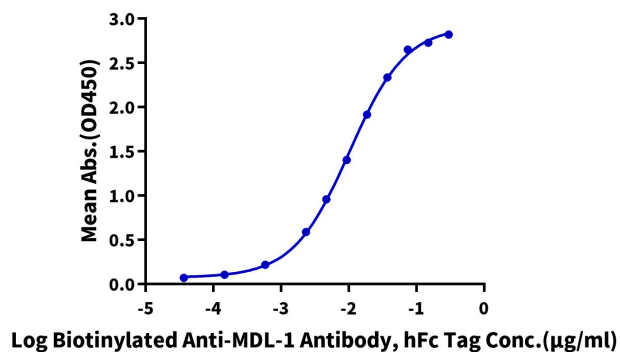
The purity of Human MDL-1 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

**Human MDL-1, hFc Tag ELISA**

0.1µg Human MDL-1, hFc Tag Per Well



Immobilized Human MDL-1, hFc Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Anti-MDL-1 Antibody, hFc Tag with the EC50 of 10.3ng/ml determined by ELISA.