

# Human TIM-3/HAVCR2 Protein

Cat. No. TIM-HM131

## Description

<b>Source</b>	Recombinant Human TIM-3/HAVCR2 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Ser22-Arg200.
<b>Accession</b>	Q8TDQ0-1
<b>Molecular Weight</b>	The protein has a predicted MW of 20.7 kDa, Due to glycosylation, the protein migrates to 50-60 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU 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 12 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

Hepatitis A virus cellular receptor 2 (HAVCR2), also known as T-cell immunoglobulin and mucin-domain containing-3 (TIM-3), is a protein that in humans is encoded by the HAVCR2 gene. TIM3 is an immune checkpoint and together with other inhibitory receptors including programmed cell death protein 1 (PD-1) and lymphocyte activation gene 3 protein (LAG3) mediate the CD8 T-cell exhaustion. TIM3 has also been shown as a CD4 Th1-specific cell surface protein that regulates macrophage activation and enhances the severity of experimental autoimmune encephalomyelitis in mice.

## Assay Data

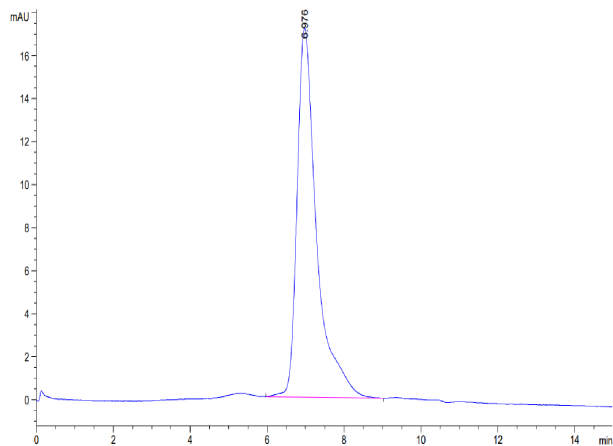
### Bis-Tris PAGE



Human TIM-3 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data



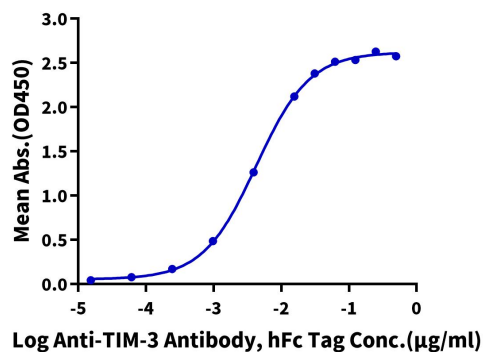
The purity of Human TIM-3 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

**Human TIM-3, His Tag ELISA**

0.05µg Human TIM-3, His Tag Per Well



Immobilized Human TIM-3, His Tag at 0.5µg/ml (100µl/well) on the plate. Dose response curve for Anti-TIM-3 Antibody, hFc Tag with the EC50 of 4.3ng/ml determined by ELISA.