

### **Synonym**

HAVCR2,TIM3,TIMD3,FLJ14428,KIM3

#### Source

Mouse TIM-3, His Tag(TI3-M52H1) is expressed from human 293 cells (HEK293). It contains AA Arg 20 - Arg 191 (Accession # <u>AAL65156.1</u>). Predicted N-terminus: Arg 20

### **Molecular Characterization**

TIM-3(Arg 20 - Arg 191) AAL65156.1

Poly-his

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

The protein has a calculated MW of 21.0 kDa. The protein migrates as 33-47 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

Less than 1.0 EU per  $\mu g$  by the LAL method / rFC method.

### **Purity**

>95% as determined by SDS-PAGE.

### **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

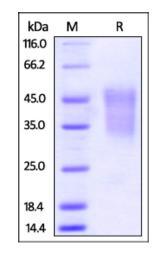
For long term storage, the product should be stored at lyophilized state at -20 $^{\circ}$ C or lower.

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**



Mouse TIM-3, 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%.

### Background

Hepatitis A virus cellular receptor 2 is also known as HAVCR2, FLJ14428, KIM3, TIM3, TIMD3, is a member of the TIM family of immune regulating molecules with one Ig-like V-type domain and a Ser/Thr-rich mucin stalk. CD4-positive T helper lymphocytes can be divided into types 1 (Th1) and 2 (Th2) on the basis of their cytokine secretion patterns. Th1 cells and their associated cytokines are involved in cell-mediated immunity to intracellular pathogens and delayed-type hypersensitivity reactions, whereas Th2 cells are involved in the control of extracellular helminthic infections and the promotion of atopic and allergic diseases. The 2



# Mouse TIM-3 / HAVCR2 Protein, His Tag





types of cells also cross-regulate the functions of the other. HAVCR2 is a Th1-specific cell surface protein that regulates macrophage activation and enhances the severity of experimental autoimmune encephalomyelitis in mice. HAVCR2 regulates macrophage activation. Inhibits T-helper type 1 lymphocyte (Th1)-mediated auto- and alloimmune responses and promotes immunological tolerance. May be also involved in T-cell homing. Dysregulation of the HAVCR2-galectin-9 pathway could underlie chronic autoimmune disease states in human, such as multiple sclerosis.

