

# **Synonym**

HAVCR2,TIM3,TIMD3,FLJ14428,KIM3

#### Source

Canine TIM-3, His Tag(TI3-C52H6) is expressed from human 293 cells (HEK293). It contains AA Ala 24 - Arg 189 (Accession # NP\_001241644.1). Predicted N-terminus: Ala 24

#### **Molecular Characterization**

TIM-3(Ala 24 - Arg 189) NP\_001241644.1

Poly-his

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

The protein has a calculated MW of 20.3 kDa. The protein migrates as 38-43 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**

>90% 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

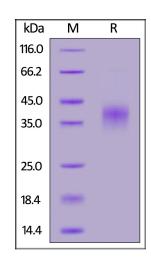
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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**



Canine 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 90%.

## 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



# Canine TIM-3 / HAVCR2 Protein, His Tag

Catalog # TI3-C52H6



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.

