

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 # AAL65156.1). 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 µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from $0.22~\mu m$ filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

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

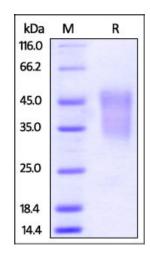
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

No activity loss was observed 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

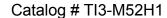


Mouse TIM-3, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

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 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

Mouse TIM-3 / HAVCR2 Protein, His Tag





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.

References

- (1) Monney, L. et al., 2002, Nature. 415: 536-41.
- (2) <u>Sabatos, CA. et al., 2003, Nat. Immunol. 4: 1102-10.</u>
- (3) Anderson, AC. et al., 2006, Curr. Opin. Immunol. 18: 665-9.

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.