A Reliable Research Partner in Life Science and Medicine

# Recombinant Mouse TIM-3/HAVCR2 Protein (aa 1-191, His Tag)

Catalog No. PKSM040338

Note: Centrifuge before opening to ensure complete recovery of vial contents.

### **Description**

Synonyms Hepatitis A virus cellular receptor 2 homolog;HAVcr-2;T-cell immunoglobulin and

mucin domain-containing protein 3;T-cell immunoglobulin mucin receptor 3;T-cell

membrane protein 3;Tim3;Timd3

**Species** Mouse

Expression Host HEK293 Cells
Sequence Met1-Arg191
Accession AAL65156.1
Calculated Molecular Weight 20.3 kDa
Tag C-His

**Bioactivity** Not validated for activity

## **Properties**

**Purity** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin** < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage** Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to

-80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots

of reconstituted samples are stable at < -20°C for 3 months.

**Shipping** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation** Lyophilized from sterile PBS, pH 7.4.

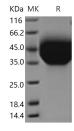
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as

protectants before lyophilization.

Please refer to the specific buffer information in the printed manual.

**Reconstitution** Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

# **Background**

Hepatitis A virus cellular receptor 2 (HAVCR2), formerly known as T cell immunoglobulin and mucin domain-3

#### For Research Use Only

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017

Web: <u>www.elabscience.com</u> Email: <u>techsupport@elabscience.com</u>

## **Elabscience Bionovation Inc.**



A Reliable Research Partner in Life Science and Medicine

(TIM-3), is a transmembrane glycoprotein expressed on the surface of terminally differentiated Th1 cells but not on Th2 cells. It was the first surface molecule that specifically identifies Th1 cells in both mice and human. Recently, identification of Galectin-9 as a ligand for TIM-3 has established the TIM-3-Galectin-9 pathway as an important regulator of Th1 immunity and tolerance induction. Engagement of Tim-3 by its ligand galectin-9 negatively regulates IFN-gamma secretion and influences the ability to induce T cell tolerance in both mice and man. It suggests a novel paradigm in which dysregulation of the TIM-3-galectin-9 pathway could underlie chronic autoimmune disease states, such as multiple sclerosis. Recent work has explored the role of TIM-3 in systemic lupus erythematosus (SLE), and their results indicate that TIM-3 may represent a novel target for the treatment of SLE. Numerous studies have demonstrated that Tim-3 influences autoimmune diseases, including diabetes and multiple sclerosis, and its role in other inflammatory diseases including allergies and cancer is beginning to become clear. In tumor rejection model, soluble form of Tim-3 (sTim-3) significantly impaired T cell antitumor immunity, evidenced by decreased antitumor CTL activity and reduced amount of tumor-infiltrating lymphocytes in tumor. sTim-3 as an immunoregulatory molecule that may be involved in the negative regulation of T cell-mediated immune response.

For Research Use Only

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017 Email: techsupport@elabscience.com

Web: www.elabscience.com