

# Recombinant Protein Technical Manual Recombinant Human TIM-3/HAVCR2 Protein (Fc & Avi Tag)

### **Product Data:**

**Product SKU:** RPES5095 **Size:** 20μg

Species: Human Cells

RPES5095

Uniprot: AAL65157.1

### **Protein Information:**

Molecular Mass: 48.8 kDa

AP Molecular Mass: 60-75 kDa

Tag: C-Fc-Avi

**Bio-activity:** 

**Purity:** > 85% as determined by reducing SDS-PAGE.

**Endotoxin:**  $< 1.0 \text{ EU per } \mu\text{g}$  as determined by the LAL method.

**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room

temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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 a 0.2 μm filtered solution of PBS, pH7.4.

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

**Application:** 

**Synonyms:** Hepatitis A virus cellular receptor 2; HAVcr-2; T-cell immunoglobulin and mucin

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

TIM-3; T-cell membrane protein 3; HAVCR2; TIM3; TIMD3

# **Immunogen Information:**

Sequence: Ser22-Arg200

# Background:

Hepatitis A virus cellular receptor 2 (HAVCR2) is a single-pass type I membrane protein and it contains 1 Iglike V-type (immunoglobulin-like) domain. The protein belongs to the immunoglobulin superfamily, and TIM family of proteins. The protein regulates macrophage activation. It inhibits T-helper type 1 lymphocyte (Th1)-mediated auto- and alloimmune responses and promotes immunological tolerance. It may be also involved in T-cell homing and it is receptor for LGALS9. CD4 (MIM 186940)-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. TIM3 is a Th1-specific cell surface protein that regulates macrophage activation and enhances the severity of experimental autoimmune encephalomyelitis in mice.