



# Recombinant Protein Technical Manual

## Recombinant Human TIM-3/HAVCR2 Protein (mFc Tag)

RPE5056

### Product Data:

**Product SKU:** RPE5056

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** Q8TDQ0

### Protein Information:

**Molecular Mass:** 46.4 kDa

**AP Molecular Mass:** 55 kDa

**Tag:** C-mFc

**Bio-activity:**

**Purity:** > 80% as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg 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, pH 7.4.

**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(Arg140Leu)

## Background:

Hepatitis A virus cellular receptor 2 (HAVCR2) is a single-pass type I membrane protein and it contains 1 Ig-like 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.