



# Recombinant Protein Technical Manual

**Recombinant Mouse TIM-3/HAVCR2 Protein (aa 2093, His Tag)**  
RPES4748

## Product Data:

**Product SKU:** RPES4748

**Size:** 10µg

**Species:** Mouse

**Expression host:** Human Cells

**Uniprot:** AAL65156.1

## Protein Information:

**Molecular Mass:** 19.9 kDa

**AP Molecular Mass:** 38-55 kDa

**Tag:** C-6His

**Bio-activity:**

**Purity:** > 95 % as determined by SDS-PAGE

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

**Storage:** 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 a 0.2 µm filtered solution of PBS, pH7.4.

**Reconstitution:** Please refer to it for detailed information.

**Application:**

**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

## Immunogen Information:

**Sequence:** Arg20-Ala193

## Background:

T cell immunoglobulin and mucin domain-3 (TIM3), also called hepatitis A virus cellular receptor 2 (HAVCR2), is a transmembrane glycoprotein of the TIM family of immune regulating molecules and plays an important role in the Th1-mediated immune response. TIM3 is expressed on the Th1 cells, CD8 T-cells, monocytes, and dendritic cells, but not on Th2 cells. TIM3 expressed by monocytes and dendritic cells facilitates phagocytosis of apoptotic cells and up-regulates cross-presentation of apoptotic cell-associated antigens through interaction with phosphatidylserine. Engagement of TIM3 by its ligand galectin-9 induces a range of immunosuppressive functions which enhance immune tolerance and inhibit anti-tumor immunity. Stimulation of TIM3 with an agonistic antibody promotes inflammation through the activation of innate immune cells. TIM3 is also regarded as a potential target molecule for immunotherapy. TIM3 and programmed cell death 1 (PD) as two important coinhibitory regulators of T cell responses, have been implicated with the T-cell dysfunction or exhaustion associated with chronic HBV infection including HBV-related HCC.