

Recombinant Protein Technical Manual

Recombinant Mouse TIM-3/HAVCR2 Protein (aa 2091, His Tag)

RPES0594

Product Data:

Product SKU: RPES0594 **Size:** 10μg

Species: Mouse Expression host: Human Cells

Uniprot: Q8VIM0

Protein Information:

Molecular Mass: 20.2 kDa

AP Molecular Mass: 30-50 kDa

Tag: C-His

Bio-activity:

Purity: > 95% 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, pH7.4.

Reconstitution: Please refer to the printed manual 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-Arg191

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.