

## Recombinant Mouse TIM-3/HAVCR2 Protein (aa 20-193, His Tag)

Catalog Number: PKSM041192

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

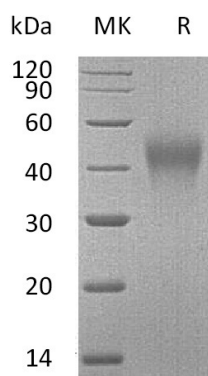
### Description

|               |  |
|---------------|--|
| Species       | Mouse  |
| Source        | HEK293 Cells-derived Mouse TIM-3/HAVCR2 protein Arg20-Ala193, with an C-terminal His |
| Calculated MW | 20.1 kDa   |
| Observed MW   | 38-55 kDa  |
| Accession     | Q8VIM0   |
| Bio-activity  | 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 a 0.2 µm filtered solution of PBS, pH 7.4.<br>Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.   |
| Reconstitution | Please refer to the specific buffer information in the printed manual.<br>Please refer to the printed manual for detailed information.   |

### Data



### 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-1) 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.