

## Product Data Sheet

## TIM-3/HAVCR2 Protein, Cynomolgus (HEK293, Fc)

Cat. No.:	HY-P74509
Synonyms:	Hepatitis A virus cellular receptor 2; HAVCR2; CD366; TIM3
Species:	Cynomolgus
Source:	HEK293
Accession:	EHH54703 (M1-R201)
Gene ID:	101926442
Molecular Weight:	Approximately 60.5&35.8 kDa

PROPERTIES	
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 $\mu g/mL$ in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

## **DESCRIPTION Background** Triggering receptor expressed on myeloid cells 2 (TREM2) is expressed on macrophages, immature monocyte-derived dendritic cells, osteoclasts, and microglia, which are immune cells in the central nervous system. Association of TREM2 with DAP10 activates the PI3K signaling pathway, leading to expression of transcription factors that include AP1, NF-kB, and NFAT. TREM2 signaling leads to downregulated transcription of genes that promote inflammation (Tnf, Il1b, and Nos2), as well as release of cytokines that prevent activation of anti-tumor CD8+ T cells. In addition, it signaling can antagonize TLR expression and signaling, resulting in reduced production of inflammatory cytokines by cultured mouse macrophages. Conversely, TREM2 expression is reduced following inflammatory signaling induction by lipopolysaccharide (a TLR4 ligand) or interferon gamma (IFNG). The neuroprotective effects of TREM2 involve not only production of anti-inflammatory cytokines, but also clearance of abnormal proteins and phagocytosis of apoptotic neurons. And TREM2 is overexpressed in many tumor types and has anti-inflammatory activities<sup>[1][2]</sup>.

## Caution: Product has not been fully validated for medical applications. For research use only.

 Tel: 609-228-6898
 Fax: 609-228-5909
 E-mail: tech@MedChemExpress.com

 Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA