Cynomolgus TIM3 / HAVCR2 Protein (Fc Tag)

Catalog Number: 90312-C02H

General Information

Gene Name Synonym:

HAVCR2

Protein Construction:

A DNA sequence encoding the cynomolgus TIM3 (EHH54703.1) (Met1-Arg201) was expressed with the Fc region of human IgG1 at the C-terminus.

Source: Cynomolgus

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Predicted N terminal: Ser 22

Molecular Mass:

The recombinant cynomolgus TIM3 comprises 418 amino acids and has a calculated molecular mass of 46.4 KDa. The apparent molecular mass of the protein is approximately 60.5 and 35.8 KDa in SDS-PAGE.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:
Samples are stable for twelve months from date of receipt at -20℃ to -80℃.

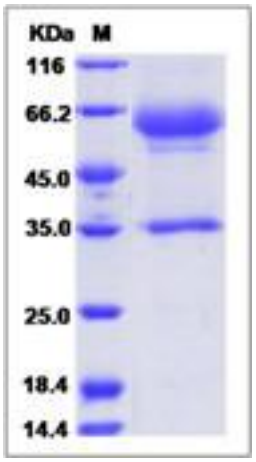
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Hepatitis A virus cellular receptor 2 (HAVCR2), formerly known as T cell immunoglobulin and mucin domain-3 (TIM-3), is a transmembrane glycoprotein expressed on the surface of terminally differentiated Th1 cells but not on Th2 cells. It was the first surface molecule that specifically identifies Th1 cells in both mice and human. Recently, identification of Galectin-9 as a ligand for TIM-3 has established the TIM-3-Galectin-9 pathway as an important regulator of Th1 immunity and tolerance induction. Engagement of Tim-3 by its ligand galectin-9 negatively regulates IFN-gamma secretion and influences the ability to induce T cell tolerance in both mice and man. It suggests a novel paradigm in which dysregulation of the TIM-3-galectin-9 pathway could underlie chronic autoimmune disease states, such as multiple sclerosis. Recent work has explored the role of TIM-3 in systemic lupus erythematosus (SLE), and their results indicate that TIM-3 may represent a novel target for the treatment of SLE. Numerous studies have demonstrated that Tim-3 influences autoimmune diseases, including diabetes and multiple sclerosis, and its role in other inflammatory diseases including allergies and cancer is beginning to become clear. In tumor rejection model, soluble form of Tim-3 (sTim-3) significantly impaired T cell antitumor immunity, evidenced by decreased antitumor CTL activity and reduced amount of tumor-infiltrating lymphocytes in tumor. sTim-3 as an immunoregulatory molecule that may be involved in the negative regulation of T cell-mediated immune response.

References

1.Geng H, et al. (2006) Soluble form of T cell Ig mucin 3 is an inhibitory molecule in T cell-mediated immune response. J Immunol. 176(3): 1411-20.
2.Anderson AC, et al. (2006) TIM-3 in autoimmunity. Curr Opin Immunol. 18(6): 665-9.
3.Anderson DE. (2007) TIM-3 as a therapeutic target in human inflammatory diseases. Expert Opin Ther Targets. 11(8): 1005-9.