Recombinant Mouse TIM4/TIMD4 Protein (His Tag)

Catalog Number: PKSM040707

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

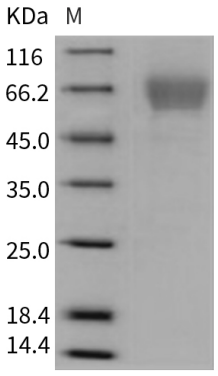
Description

Species	Mouse
Source	HEK293 Cells-derived Mouse TIM4/TIMD4 protein Met 1-Thr 279, with an C-terminal His
Calculated MW	29.3 kDa
Observed MW	60-70 kDa
Accession	NP_848874.3
Bio-activity	Not validated for activity

Properties

Purity	> 94 % 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 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 94 % as determined by reducing SDS-PAGE.

Background

A type I transmembrane protein called TIM4 (T-cell immunoglobulin- and mucin-domain-containing molecule; also known as TIMD4), which belongs to the immunoglobulin superfamily and TIM family. TIM4 is involved in regulating T-cell proliferation and lymphotoxin signaling. It is a ligand for HAVCR1/TIMD1. Recent reports indicate that dendritic cell (DC)-derived T-cell immunoglobulin and mucin domain molecule (TIM)-4, which is expressed on dendritic cells and macrophages, plays an important role in the initiation of T(H)2 polarization. TIM4 bound apoptotic cells by recognizing phosphatidylserine via its immunoglobulin domain. The expression of TIM4 in fibroblasts enhanced their ability to engulf apoptotic cells. TIM4 is phosphatidylserine receptor for the engulfment of apoptotic cells, and may also be involved in intercellular signalling in which exosomes are involved. Modulation of TIM4 production in dendritic cells (DCs) represents a novel therapeutic approach for the treatment of peanut allergy. The interaction of TIM1/TIM4 played a critical role in sustaining the polarization status of Th2 cells in allergic rhinitis (AR) patients. Cross-linking FcgammaRI by antigen/IgG complexes increased the production of TIM4 by dendritic cells via upregulating tumor necrosis factor-alpha in DCs. Specific immunotherapy (SIT) suppresses the skewed Th2 responses via disrupting the interaction of TIM1/TIM4 in antigen-specific Th2 cells.

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