

# Complex Biotech Co., Ltd

# **CD365 Recombinant Protein**

Catalog: BCP3461 Host: E.coli Tag: His-tag

#### **BackGround:**

T cell Ig- and mucin-domain-containing molecules (TIMs) are a family of transmembrane proteins expressed by various immune cells. TIM-1 (HAVCR1 (hepatitis A virus cellular receptor 1), KIM-1 (kidney injury molecule-1) was originally identified as a receptor for hepatitis A virus. TIM-1 also acts as a costimulatory receptor on T cells and following activation, associates with the TCR complex to upregulate signaling and cytokine production. Another TIM family member, TIM-4, is expressed by antigen presenting cells and is a ligand for TIM-1. TIM-1 expressed by Th1 and Th17 cells was also recently shown to interact with P-selectin to mediate T cell trafficking during inflammation and autoimmune disease. NKT cells also express TIM-1, and engagement of TIM-1 on NKT cells leads to increased production of IL-4, but decreased production of IFN-gamma. TIM-1 is also a receptor for phosphatidylserine exposed by cells undergoing apoptosis. Detection of phosphatidylserine by TIM-1 expressed on NKT cells results in activation, proliferation, and cytokine production. Expression of TIM-1 on regulatory B cells is required for optimal production of IL-10. Mice lacking the TIM-1 mucin domain have decreased production of IL-10 by regulatory B cells, hyperactive T cells, increased levels of inflammatory cytokines, and enhanced severity of autoimmune disease. In addition, TIM-1 polymorphisms are associated with susceptibility to atopic diseases including asthma. Finally, expression of TIM-1 is increased in renal tubular epithelial cells following kidney injury.

## **Product:**

PBS, 4M Urea, PH7.4

## **Molecular Weight:**

~34kDa

## **Swiss-Prot:**

Q96D42

#### **Purification&Purity:**

Transferred into competent cells and the supernatant was purified by NI column affinity chromatography and the purity is > 85% (by SDS-PAGE).

#### **Restriction Sites:**

NdeI-XhoI

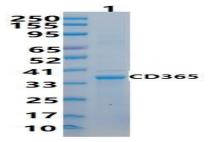
# Storage&Stability:

Store at  $4\,\mathrm{C}$  short term. Aliquot and store at  $-20\,\mathrm{C}$  long term. Avoid freeze-thaw cycles.

# **Expression Vector:**

pet-22b(+)

#### **DATA:**



#### Note:

For research use only, not for use in diagnostic procedure.