# Recombinant Human IFITM3 Protein (Fc Tag)

**Catalog Number: PKSH030843**

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

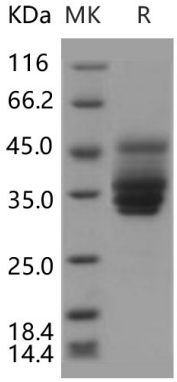
## Description

| | |
|---|---|
| **Species** | Human |
| **Source** | HEK293 Cells-derived Human IFITM3 protein Met 1-His57, with an N-terminal mFc |
| **Calculated MW** | 32.9 kDa |
| **Observed MW** | 33-45 kDa |
| **Accession** | NP_066362.2 |
| **Bio-activity** | Not validated for activity |

## Properties

| | |
|---|---|
| **Purity** | > 99 % 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<br>Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.<br>Please refer to the specific buffer information in the printed manual. |
| **Reconstitution** | Please refer to the printed manual for detailed information. |

## Data




> 99 % as determined by reducing SDS-PAGE.

## Background

Interferon-induced transmembrane protein 3 (IFITM3) belongs to the CD225 family. To replicate, viruses must gain access to the host cell's resources. Interferon (IFN) regulates the actions of a large complement of interferon effector genes (IEGs) that prevent viral replication. The interferon inducible transmembrane protein family members, IFITM1, 2 and 3, are IEGs required for inhibition of influenza A virus, dengue virus, and West Nile virus replication in vitro. IFITM3 is an IFN-induced antiviral protein that mediates cellular innate immunity to at least three major human pathogens, namely influenza A H1N1 virus, West Nile virus (WNV), and dengue virus (WNV), by inhibiting the early step(s) of replication. It is both necessary and sufficient for preventing the emergence of viral genomes from the endosomal pathway. Viral pseudoparticles were inhibited from transferring their contents into the host cell cytosol by IFN, and IFITM3 was required and sufficient for this action. IFITM3 overexpression is sufficient for this phenotype. Moreover, IFITM3 partially resides in late endosomal and lysosomal structures, placing it in the path of invading viruses.


Toll-free: 1-888-852-8623
Tel: 1-832-243-6086
Fax: 1-832-243-6017
Web:www.elabscience.com
Email:techsupport@elabscience.com