

## 32-8236: Recombinant Human Ubiquitin-Like Protein ISG15/ISG15 (C-6His)

 Gene :
 ISG15

 Gene ID :
 9636

 Uniprot ID :
 P05161

## Description

Source: E. coli. MW :18.2kD.

Recombinant Human Interferon-stimulated Gene 15 is produced by our E.coli expression system and the target gene encoding Gly2-Gly157 is expressed with a 6His tag at the C-terminus. Ubiquitin-Like Protein ISG15 (ISG15) is a ubiquitin-like protein that becomes conjugated to many cellular proteins upon activation by interferon-alpha and -beta. Several functions have been ascribed to the encoded protein, including chemotactic activity towards neutrophils, direction of ligated target proteins to intermediate filaments, cell-to-cell signaling, and antiviral activity during viral infections. While conjugates of this protein have been found to be noncovalently attached to intermediate filaments, this protein is sometimes secreted. ISG15 becomes conjugated to a diverse set of proteins after IFN-alpha/beta stimulation or microbial challenge. The functions or biochemical consequences ISG15 conjugation to proteins are not yet known, but it appears that this modification does not target proteins for proteasomal degradation. ISG15 shows specific chemotactic activity towards neutrophils and activates them to induce release of eosinophil chemotactic factors. Upon interferon treatment, ISG15 can be detected in both free and conjugated forms, and is secreted from monocytes and lymphocytes where it can function as a cytokine. In the cell, ISG15 co-localizes with intermediate filaments and ISGylation may modulate the JAK-STAT pathway or certain aspects of neurological disease.

## **Product Info**

Amount :	10 µg / 50 µg
Content :	Supplied as a 0.2 $\mu$ m filtered solution of 50mM HEPES, 100mM NaCl, pH 8.0.
Storage condition :	Store at -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.
Amino Acid :	GWDLTVKMLAGNEFQVSLSSSMSVSELKAQITQKIGVHAFQQRLAVHPSGVALQDRVPLASQGLGPGSTVLLV VDKCDEPLNILVRNNKGRSSTYEVRLTQTVAHLKQQVSGLEGVQDDLFWLTFEGKPLEDQLPLGEYGLKPLSTV FMNLRLRGGLEHHHHHH

## **Application Note**

**Endotoxin :** Less than 0.1 ng/ $\tilde{A}$ ] $\hat{A}$ µg (1 IEU/ $\tilde{A}$ ] $\hat{A}$ µg) as determined by LAL test.