pro-ISG15 (human), (recombinant) (Histag)

ISG15 is expressed in its pro-form with a short C-terminal extension, which is processed to expose the C-terminal glycine residue that is essential for conjugation to target proteins.

ISG15 is an interferon (IFN)- α/β -induced ubiquitin-like protein, also known as ubiquitin cross-reactive protein (UCRP), that is conjugated to cellular proteins during innate immune responses to bacterial and viral infections, including HIV. Although the biochemical consequences of ISG15 conjugation and the fate of the conjugated proteins are not currently known, it does not appear that ISG15 targets proteins for proteasomal degradation. ISG15 contains two ubiquitin homology domains in tandem and shows ~30% identity to ubiquitin. ISG15 is synthesized as a 17kDa pro-form (-GTEPGGRS C-terminal extension), which is subsequently cleaved to expose di-glycine residues at the carboxyl terminus, essential for subsequent conjugation to target proteins. Conjugation of ISG15 to cellular proteins occurs in a parallel but distinct mechanism to that of ubiquitin. The E1 activating enzyme for ISG15, is a single-subunit, ATP dependent enzyme, also known as Ube1L, while UbcH8, a member of the ubiquitin E2-conjugating enzyme family, has been identified as a major E2 enzyme for the ISGylation pathway, interacting with Ube1L to facilitate target protein ISGylation. BML-UW9230 is a recombinant protein produced in *E. coli* corresponding to the human pro-ISG15 sequence (Accession number: P05161) encompassing an N-terminal His_e tag within a leader sequence.

Ordering Information

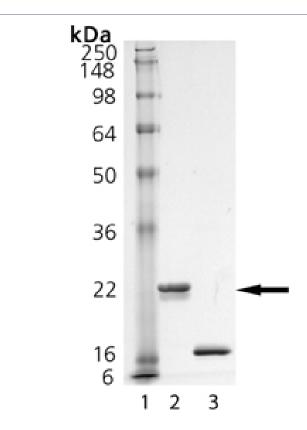
Order Online »

BML-UW9230-0500 50

500µg

Manuals, SDS & CofA

View Online »



SDS-PAGE Analysis. Lane 1: MW Marker, Lane 2: 1 μ g pro-ISG15 (Prod. No. BML-UW9230), Lane 3: 1 μ g ISG15 (Prod. No. BML-UW9235).

Handling & Storage

Handling Avoid freeze/thaw cycles. After opening, prepare aliquots and store at -80°C.

Long Term Storage -80°C

Shipping Dry Ice

Regulatory Status RUO - Research Use Only

Product Details

Application Notes Uses:

1. Study of ISG15 regulation and processing.

2. Substrate for delSGylating enzymes (C-terminal

hydrolase activity).

Formulation Liquid. In 20mM HEPES, pH 8.0, containing 50mM

sodium chloride and 1mM DTT.

MW ~23kDa

Purity ≥95% (SDS-PAGE)

Source Produced in E. coli. Human pro-ISG15 is fused at the N-

terminus to a His-tag.

UniProt ID P05161

Last modified: May 29, 2024

