9051 Mira Mesa Blvd, #910094
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ISG15 Human

ISG15 Human Recombinant
RCP1133

Product Overview

Name	ISG15 Human
Description	
ISG15 Human Recombinant	
Accession (Primary)	P05161
Synonyms	
ISG15, G1P2, IFI15, UCRP, ISG15 Ubiquitin-like modifier.	
Introduction	
ISG15 ubiquitin-like Modifier is conjugated to the intracellular target proteins after IFN-alpha or IFN-beta stimulation. ISG15 enzymatic pathway is partially distinct from that of ubiquitin, differing in substrate specificity and interaction with ligating enzymes. ISG15 conjugation pathway uses a dedicated E1 enzyme, but seems to converge with the ub conjugation pathway at the level of a specific E2 enzyme. ISG15 protein targets include STAT1, SERPINA 3G/SPI2A, JAK1, MAPK3/ERK1, PLCG1, EIF2AK2/PKR, MX1/MXA, and RIG-1. Deconjugated by USP18/UBP43 shows specific chemotactic activity towards neutrophils and activates them to induce release of eosinophil chemotactic factors. ISG15 serves as a trans-acting binding factor directing the association of ligated target proteins to intermediate filaments. ISG15 plays a role in autocrine, paracrine and endocrine mechanisms, as in cell-to-cell signaling, possibly partly by inducing ifn-gamma secretion by monocytes and macrophages. ISG15 displays antiviral activity during viral infections. ISG15 in response to IFN-TAU secreted by the conceptus, ligates to and regulate proteins involved in the release of prostaglandin F2-alpha and thus prevent lysis of the corpus luteum and maintain the pregnancy. ISG15 shares several common properties with other ubiquitin-like molecules, but its activity is strongly regulated by precise signaling pathways that have a role in innate immunity.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile Filtered colorless solution.	
Formulation	
The ISG15 solution contains 20mM Tris-HCl pH-8, 100mM NaCl and 1mM DTT.	
Stability	
Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term	

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storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Purity

Greater than 98.0% as determined by SDS-PAGE.

Amino acid sequence

MADQLTEEQI AEFKEAFSLF DKDGDGTITT KELGTVMRSL GQNPTEAELQ DMINEVDADG NGTIDFPEFL TMMARKMKDT DSEEEIREAF RVFDKDGNGY ISAAELRHVM TNLGEKLTDE EVDEMIREAD IDGDGQVNYE EFVQMMTAKG S MGWDLTVKM LAGNEFQVSL SSSMSVSELK AQITQKIGVH AFQQRLAVHP SGVALQDRVP LASQGLGPGS TVLLVVDKCD EPLNILVRNN KGRSSTYEVR LTQTVAHLKQ QVSGLEGVQD DLFWLTFEGK PLEDQLPLGE YGLKPLSTVF MNLRLRGG.

Precautions

ISG15 Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P05161)