Datasheet for ABIN1047868

ISG15 Protein (AA 2-157, full length) (GST tag)

1 Image | 3 Publications

Go to Product page

Overview

Quantity:	100 µg
Target:	ISG15
Protein Characteristics:	AA 2-157, full length
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ISG15 protein is labelled with GST tag.
Application:	ELISA

Product Details

Sequence:	GWDLTVKMLA GNEFQVSLSS SMSVSELKAQ ITQKIGVHAF QQRLAVHPSG VALQDRVPLA SQGLGPGSTV LLVVDKCDEP LSILVRNNKG RSSTYEVRLT QTVAHLKQQV SGLEGVQDDL FWLTFEGKPL EDQLPLGEYG LKPLSTVFMN LRLRGG
Characteristics:	Please inquire if you are interested in this recombinant protein expressed in E. coli, mammalien cells or by baculovirus infection. Be aware about differences in price and lead time.
Purity:	90 %

Target Details

Target:	ISG15
Alternative Name:	Ubiquitin-like protein ISG15 protein (ISG15 Products)
Background:	Ubiquitin-like protein that is conjugated to intracellular target proteins after IFN-alpha or IFN-

Target Details

	beta stimulation. Its 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. Targets include STAT1, SERPINA3G/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. May serve as a trans-acting binding factor directing the association of ligated target proteins to intermediate filaments. May also be involved in autocrine, paracrine and endocrine mechanisms, as in cell-to-cell signaling, possibly partly by inducing IFN-gamma secretion by monocytes and macrophages. Seems to display antiviral activity during viral infections. Ref.12 Ref.13 Ref.14 Ref.15 Ref.20 Ref.21 In response to IFN-tau secreted by the conceptus, may ligate to and regulate proteins involved in the release of prostaglandin F2-alpha (PGF), and thus prevent lysis of the corpus luteum and maintain the pregnancy By similarity. Ref.12 Ref.13 Ref.14 Ref.15 Ref.20 Ref.21
Molecular Weight:	44.4 kD
UniProt:	Q64339

Application Details

Comment:	The yeast protein expression system is the most economical and efficient eukaryotic system for secretion and intracellular expression. A protein expressed by the mammalian cell system is of very high-quality and close to the natural protein. But the low expression level, the high cost of medium and the culture conditions restrict the promotion of mammalian cell expression systems. The yeast protein expression system serve as a eukaryotic system integrate the advantages of the mammalian cell expression system. A protein expressed by yeast system could be modificated such as glycosylation, acylation, phosphorylation and so on to ensure the native protein conformation. It can be used to produce protein material with high added value that is very close to the natural protein. Our proteins produced by yeast expression system has been used as raw materials for downstream preparation of monoclonal antibodies.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Concentration:	0.2-2 mg/mL

Handling

Buffer:	Tris-based buffer, 50 % glycerol
Handling Advice:	Repeated freezing and thawing is not recommended. Store working aliquots at 4 °C for up to one week
Storage:	-20 °C
Storage Comment:	Store at -20 °C for extended storage, conserve at -20 °C or -80 °C

Publications

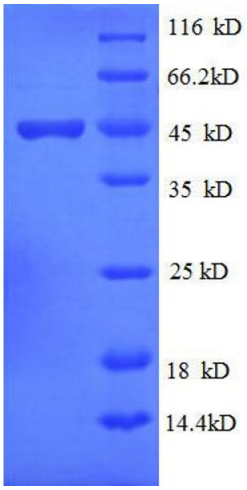
Product cited in:

Knight, Fahey, Cordova, Hillman, Kutny, Reich, Blomstrom: "A 15-kDa interferon-induced protein is derived by COOH-terminal processing of a 17-kDa precursor." in: **The Journal of biological chemistry**, Vol. 263, Issue 10, pp. 4520-2, (1988) (PubMed).

Reich, Evans, Levy, Fahey, Knight, Darnell: "Interferon-induced transcription of a gene encoding a 15-kDa protein depends on an upstream enhancer element." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 84, Issue 18, pp. 6394-8, (1987) (PubMed).

Blomstrom, Fahey, Kutny, Korant, Knight: "Molecular characterization of the interferon-induced 15-kDa protein. Molecular cloning and nucleotide and amino acid sequence." in: **The Journal of biological chemistry**, Vol. 261, Issue 19, pp. 8811-6, (1986) (PubMed).

Images



SDS-PAGE

Image 1. ISG15 Ubiquitin-Like Modifier (ISG15) (AA 2-157), (full length) protein (GST tag)