Datasheet for ABIN7562884

IRF1 Protein (AA 1-329) (His tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	IRF1
Protein Characteristics:	AA 1-329
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This IRF1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Irf1 Protein expressed in mammalian cells.
Sequence:	MPITRMRMRP WLEMQINSNQ IPGLIWINKE EMIFQIPWKH AAKHGWDINK DACLFRSWAI HTGRYKAGEK EPDPKTWKAN FRCAMNSLPD IEEVKDQSRN KGSSAVRVYR MLPPLTRNQR KERKSKSSRD TKSKTKRKLC GDVSPDTFSD GLSSSTLPDD HSSYTTQGYL GQDLDMERDI TPALSPCVVS SSLSEWHMQM DIIPDSTTDL YNLQVSPMPS TSEAATDEDE EGKIAEDLMK LFEQSEWQPT HIDGKGYLLN EPGTQLSSVY GDFSCKEEPE IDSPRGDIGI GIQHVFTEMK NMDSIMWMDS LLGNSVRLPP SIQAIPCAP **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:

Product Details

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	IRF1
Alternative Name:	Irf1 (IRF1 Products)
Background:	Interferon regulatory factor 1 (IRF-1),FUNCTION: Transcriptional regulator which displays a remarkable functional diversity in the regulation of cellular responses (PubMed:11244049, PubMed:11846971, PubMed:11846974, PubMed:16932750, PubMed:20049431, PubMed:25774715). Regulates transcription of IFN and IFN-inducible genes, host response to viral and bacterial infections, regulation of many genes expressed during hematopoiesis, inflammation, immune responses and cell proliferation and differentiation, regulation of the cell cycle and induction of growth arrest and programmed cell death following DNA damage (PubMed:11244049, PubMed:11846971, PubMed:11846974, PubMed:16932750, PubMed:20049431). Stimulates both innate and acquired immune responses through the activation of specific target genes and can act as a transcriptional activator and repressor regulating target genes by binding to an interferon-stimulated response element (ISRE) in their promoters (PubMed:11244049, PubMed:11846971, PubMed:11846974, PubMed:16932750, PubMed:20049431). Binds to a consensus sequence in gene promoters (By similarity). Its target genes for transcriptional activation activity are: genes involved in anti-viral response,

	such as IFN-alpha/beta, RIGI, TNFSF10/TRAIL, ZBP1, OAS1/2, PIAS1/GBP, EIF2AK2/PKR and RSAD2/viperin, antibacterial response, such as GBP2, GBP5, IRGB10 and NOS2/INOS, anti-proliferative response, such as p53/TP53, LOX and CDKN1A, apoptosis, such as BBC3/PUMA, CASP1, CASP7 and CASP8, immune response, such as IL7, IL12A/B and IL15, PTGS2/COX2 and CYBB, DNA damage responses and DNA repair, such as POLQ/POLH, MHC class I expression, such as TAP1, PSMB9/LMP2, PSME1/PA28A, PSME2/PA28B and B2M and MHC class II expression, such as CIITA, metabolic enzymes, such as ACOD1/IRG1 (PubMed:12387893, PubMed:17018642, PubMed:18955028, PubMed:21909274, PubMed:20308629, PubMed:25774715, PubMed:27693356, PubMed:29321274, PubMed:30635240). Represses genes involved in anti-proliferative response, such as BIRC5/survivin, CCNB1, CCNE1, CDK1, CDK2 and CDK4 and in immune response, such as FOXP3, IL4, ANXA2 and TLR4 (PubMed:18641303). Stimulates p53/TP53-dependent transcription through enhanced recruitment of EP300 leading to increased acetylation of p53/TP53 (By similarity). Plays an important role in immune response directly affecting NK maturation and activity, macrophage production of IL12, Th1 development and maturation of CD8+ T-cells (PubMed:11244049, PubMed:11846971, PubMed:11846974, PubMed:16932750, PubMed:20049431). Also implicated in the differentiation and maturation of dendritic cells and in the suppression of regulatory T (Treg) cells development (PubMed:11244049, PubMed:11846971, PubMed:11846974, PubMed:16932750, PubMed:20049431). Acts as a tumor suppressor and plays a role not only in antagonism of tumor cell growth but also in stimulating an immune response against tumor cells (PubMed:11244049, PubMed:11846971, PubMed:11846974, PubMed:16932750, PubMed:20049431). {ECO:0000250|UniProtKB:P10914, ECO:0000269|PubMed:11244049, ECO:0000269|PubMed:11846971, ECO:0000269|PubMed:11846974, ECO:0000269|PubMed:12387893, ECO:0000269|PubMed:16932750, ECO:0000269|PubMed:17018642, ECO:0000269|PubMed:18641303, ECO:0000269|PubMed:18955028, ECO:0000269|PubMed:20049431, ECO:0000269|PubMed:20308629, ECO:0000269|PubMed:21909274, ECO:0000269|PubMed:25774715, ECO:0000269|PubMed:27693356, ECO:0000269|PubMed:29321274, ECO:0000269|PubMed:30635240, ECO:0000303|PubMed:11244049, ECO:0000303|PubMed:11846971, ECO:0000303|PubMed:11846974, ECO:0000303|PubMed:16932750, ECO:0000303|PubMed:20049431}.
Molecular Weight:	37.3 kDa
UniProt:	P15314
Pathways:	Interferon-gamma Pathway, Response to Growth Hormone Stimulus, Positive Regulation of

Target Details

	Immune Effector Process, Hepatitis C, Autophagy

Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months