

## Product datasheet for **TP525563**

### Irf1 (NM\_008390) Mouse Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse interferon regulatory factor 1 (Irf1), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR225563 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MPITRMRMRPWLEMQINSNQIPGLIWINKEEMIFQIPWKHAAKHGWDINKDACLFRSWAIHTGRYKAGEK  
EPDPKTKWANKFRCAMNSLPDIEEVKDQSRNKGSSAVRVYRMLPPLTRNQRKERKSKSSRDTKSKTKRKLK  
GDVSPDTFSDGLSSSTLPDDHSSYTTQGYLGQDLDMERDITPALSPCVSSSLSEWHMQMDIIPDSTTDL  
YNLQVSPMPSTSEAATDEDEEGKIAEDLMKLFQSEWQPTHIDGKGYLLNEPGTQLSSVYGDVFSCKEEPE  
IDSPRGDIGIGIQHVFTMKNMDSIMWMDSLLGNSVRLPPSIQAIPCAP

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

Tag:	C-MYC/DDK
Predicted MW:	37.3 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<a href="#">NP_032416</a>
Locus ID:	16362
UniProt ID:	<a href="#">P15314</a> , <a href="#">Q5SX13</a>



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RefSeq Size:	2151
Cytogenetics:	11 32.0 cM
RefSeq ORF:	990
Synonyms:	AU020929; Irf-1
Summary:	<p>Transcriptional regulator which displays a remarkable functional diversity in the regulation of cellular responses. These include the regulation 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. 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. Its target genes for transcriptional activation activity are: genes involved in anti-viral response, such as IFN-alpha/beta, DDX58/RIG-I, TNFSF10/TRAIL, OAS1/2, PIAS1/GBP, EIF2AK2/PKR and RSAD2/viperin; antibacterial response, such as 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. 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. Stimulates p53/TP53-dependent transcription through enhanced recruitment of EP300 leading to increased acetylation of p53/TP53. 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. Also implicated in the differentiation and maturation of dendritic cells and in the suppression of regulatory T (Treg) cells development. 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.[UniProtKB/Swiss-Prot Function]</p>