

Product datasheet for MR206641L3V

OriGene Technologies, Inc.

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Irf3 (NM_016849) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: Irf3 (NM_016849) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Irf3

Synonyms: C920001K05Rik; IRF-3

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

 Tag:
 Myc-DDK

 ACCN:
 NM_016849

ORF Size: 1257 bp

ORF Nucleotide

Sequence:

Cytogenetics:

The ORF insert of this clone is exactly the same as(MR206641).

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through

naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

RefSeq: <u>NM 016849.3</u>

 RefSeq Size:
 2041 bp

 RefSeq ORF:
 1260 bp

 Locus ID:
 54131

 UniProt ID:
 P70671

7 B3



Gene Summary:

Key transcriptional regulator of type I interferon (IFN)-dependent immune responses which plays a critical role in the innate immune response against DNA and RNA viruses (PubMed:15800576). Regulates the transcription of type I IFN genes (IFN-alpha and IFN-beta) and IFN-stimulated genes (ISG) by binding to an interferon-stimulated response element (ISRE) in their promoters (PubMed:15800576). Acts as a more potent activator of the IFN-beta (IFNB) gene than the IFN-alpha (IFNA) gene and plays a critical role in both the early and late phases of the IFNA/B gene induction (PubMed:16846591, PubMed:16979567, PubMed:20049431). Found in an inactive form in the cytoplasm of uninfected cells and following viral infection, double-stranded RNA (dsRNA), or toll-like receptor (TLR) signaling, is phosphorylated by IKBKE and TBK1 kinases (PubMed:16846591, PubMed:16979567, PubMed:20049431). This induces a conformational change, leading to its dimerization and nuclear localization and association with CREB binding protein (CREBBP) to form dsRNAactivated factor 1 (DRAF1), a complex which activates the transcription of the type I IFN and ISG genes (PubMed:16846591, PubMed:16979567, PubMed:20049431). Can activate distinct gene expression programs in macrophages and can induce significant apoptosis in primary macrophages (PubMed:16846591, PubMed:16979567, PubMed:20049431).[UniProtKB/Swiss-Prot Function]