## IRF4 Conjugated Antibody

Catalog No: #C38169



Package Size: #C38169-AF350 100ul #C38169-AF405 100ul #C38169-AF488 100ul

#C38169-AF555 100ul #C38169-AF594 100ul #C38169-AF647 100ul

#C38169-AF680 100ul #C38169-AF750 100ul #C38169-Biotin 100ul

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## Description

Product Name	IRF4 Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of total IRF4 antibody.
Immunogen Description	Recombinant protein of human IRF4.
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	IRF4;LSIRF;MUM1;
Accession No.	Swiss-Prot#:Q15306NCBI Gene ID:3662
Uniprot	Q15306
GeneID	3662;
Excitation Emission	AF350: 346nm/442nm
	AF405: 401nm/421nm
	AF488: 493nm/519nm
	AF555: 555nm/565nm
	AF594: 591nm/614nm
	AF647: 651nm/667nm
	AF680: 679nm/702nm
	AF750: 749nm/775nm
Calculated MW	52
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

## **Application Details**

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250
AF405 conjugated: most applications: 1: 50 - 1: 250
AF488 conjugated: most applications: 1: 50 - 1: 250
AF555 conjugated: most applications: 1: 50 - 1: 250
AF594 conjugated: most applications: 1: 50 - 1: 250
AF647 conjugated: most applications: 1: 50 - 1: 250
AF680 conjugated: most applications: 1: 50 - 1: 250
AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

## Background

Interferon regulatory factors (IRFs) comprise a family of transcription factors that function within the Jak/Stat pathway to regulate interferon (IFN) and IFN-inducible gene expression in response to viral infection (1). IRFs play an important role in pathogen defense, autoimmunity, lymphocyte development, cell growth, and susceptibility to transformation. The IRF family includes nine members: IRF-1, IRF-2, ISGF3y/p48, IRF-3, IRF-4 (Pip/LSIRF/ICSAT), IRF-5, IRF-6, IRF-7, and IRF-8/ICSBP. All IRF proteins share homology in their amino-terminal DNA-binding domains. IRF family members regulate transcription through interactions with proteins that share similar DNA-binding motifs, such as IFN-stimulated response elements (ISRE), IFN consensus sequences (ICS), and IFN regulatory elements (IRF-E) (2).

IRF-4 was independently cloned by three groups and demonstrated to have roles in different contexts of lymphoid regulation (3-5). First, IRF-4 (Pip) was found to associate with PU.1, a hematopoietic specific member of the ETS family, and to regulate the expression of B-cell specific genes (3). Second, it was characterized as a lymphoid-specific member of the IRF family (LSIRF) and able to bind to ISRE (4). Third, it was identified in activated T cells as a factor that binds to the promoter of the interleukin-5 gene (ICSAT), and shown to repress gene activation induced by IFN (5). IRF-4 is expressed in all stages of B cell development and in mature T cells, and is inducible in primary lymphocytes by antigen mimetic stimuli such as Concavalin A, CD3 crosslinking, anti-IgM and PMA treatment (4,5). Mice deficient in IRF-4 show normal distribution of B and T lymphocytes at 4 to 5 weeks, but later develop progressive generalized lymphadenopathy, suggesting a role for IRF-4 in the function and homeostasis of mature B- and T-lymphocytes (6).

Note: This product is for in vitro research use only