

PRODUCT INFORMATION



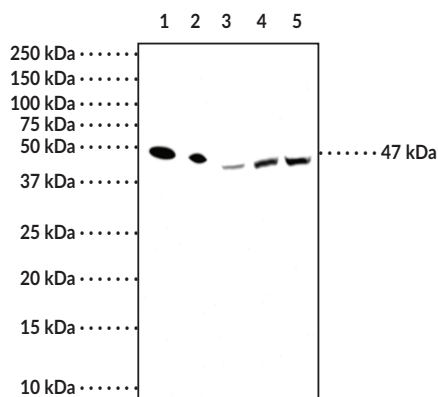
IRF3 Monoclonal Antibody (Clone 1E10)

Item No. 25921

Overview and Properties

Contents:	This vial contains 100 µg of protein G-purified antibody.
Synonym:	Interferon Regulatory Factor 3
Immunogen:	IRF3 (human recombinant)
Species Reactivity:	(+) Human
Uniprot No.:	Q14653
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide
Clone:	1E10
Host:	Mouse
Isotype:	IgG2a
Applications:	ELISA and Western blot (WB); the recommended starting dilution for ELISA and WB is 1:1,000. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



Lane 1: IRF3 Recombinant Protein (5 ng)
Lane 2: IRF3 Recombinant Protein (1 ng)
Lane 3: MCF7 Cell Lysate (50 µg)
Lane 4: A549 Cell Lysate (50 µg)
Lane 5: COS-1 Cell Lysate (50 µg)

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Interferon regulatory factor 3 (IRF3) is a member of the IRF family that plays a crucial role in activation of innate immunity and inflammation in response to viral infection, functioning as a molecular switch for antiviral activity.¹⁻⁵ Double-stranded RNA generated during a viral infection leads to IRF3 activation through serine/threonine phosphorylation by TBK1 (Item No. 22817) or IKK ϵ (IKBKE) kinases, which induces a conformational change leading to its dimerization, nuclear localization, and association with CREB binding protein (CREBBP)/p300.^{1,2,3,6} The complex formed by this association, known as DRAF1, activates transcription of interferon α (IFN- α) and IFN- β as well as other IFN-induced genes, which play a critical role in the type 1 IFN-dependent immune response.^{1,5,6} Cayman's IRF3 Monoclonal Antibody can be used for Western blot and ELISA applications. The antibody recognizes IRF3 at ~47 kDa from human samples.

References

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5. Peteranderl, C. and Herold, S. The impact of the interferon/TNF-related apoptosis-inducing ligand signaling axis on disease progression in respiratory viral infection and beyond. *Front. Immunol.* **8:313**, (2017).
6. Gu, L., Fullam, A., Brennan, R., *et al.* Human DEAD box helicase 3 couples I κ B kinase ϵ to interferon regulatory factor 3 activation. *Mol. Cell. Biol.* **33(10)**, 2004-2015 (2013).

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