

Human IRF3 ELISA Kit ab283551

Recombinant SimpleStep ELISA®

[4 Images](#)

Overview

Product name Human IRF3 ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Extract	8			4.8%

Inter-assay

Sample	n	Mean	SD	CV%
Extract	3			6.44%

Sample type Cell Lysate

Assay type Sandwich (quantitative)

Sensitivity 2.9 pg/ml

Range 26.56 pg/ml - 1700 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Cell Lysate	99	91% - 110%

Assay time 1h 30m

Assay duration One step assay

Species reactivity **Reacts with:** Human

Product overview

Human IRF3 ELISA kit (ab283551) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Human IRF3 protein in human cell culture extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human IRF3 with 2.9 pg/mL sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This

approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate (**ab203359**) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

Notes IRF3, Interferon regulatory factor 3, is a transcription factor which plays a primary role in innate immunity. In the course of viral infection IRF3 will be phosphorylated, dimerize, and translocate to the nucleus where it regulates transcription of type I IFN genes. The immunogen from which the antibodies in this kit were raised represent the full-length protein. This protein shares only 70% and 73% sequence identity with mouse and rat, respectively, and is not expected to be highly cross-reactive.

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.

It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

Platform Pre-coated microplate (12 x 8 well strips)

Properties

Storage instructions Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Human IRF3 Capture Antibody	1 x 600µl
10X Human IRF3 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent CPR2	1 x 6ml
Human IRF3 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 12ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml

Components	1 x 96 tests
TMB Development Solution	1 x 12ml

Involvement in disease

Genetic variations in IRF5 are associated with susceptibility to inflammatory bowel disease type 14 (IBD14) [MIM:612245]. IBD14 is a chronic, relapsing inflammation of the gastrointestinal tract with a complex etiology. It is subdivided into Crohn disease and ulcerative colitis phenotypes. Crohn disease may affect any part of the gastrointestinal tract from the mouth to the anus, but most frequently it involves the terminal ileum and colon. Bowel inflammation is transmural and discontinuous; it may contain granulomas or be associated with intestinal or perianal fistulas. In contrast, in ulcerative colitis, the inflammation is continuous and limited to rectal and colonic mucosal layers; fistulas and granulomas are not observed. Both diseases include extraintestinal inflammation of the skin, eyes, or joints.

Genetic variations in IRF5 are associated with susceptibility to systemic lupus erythematosus type 10 (SLEB10) [MIM:612251]. Systemic lupus erythematosus (SLE) is a chronic, inflammatory and often febrile multisystemic disorder of connective tissue. It affects principally the skin, joints, kidneys and serosal membranes. It is thought to represent a failure of the regulatory mechanisms of the autoimmune system.

Genetic variations in IRF5 are a cause of susceptibility to rheumatoid arthritis (RA) [MIM:180300]. It is a systemic inflammatory disease with autoimmune features and a complex genetic component. It primarily affects the joints and is characterized by inflammatory changes in the synovial membranes and articular structures, widespread fibrinoid degeneration of the collagen fibers in mesenchymal tissues, and by atrophy and rarefaction of bony structures.

Sequence similarities

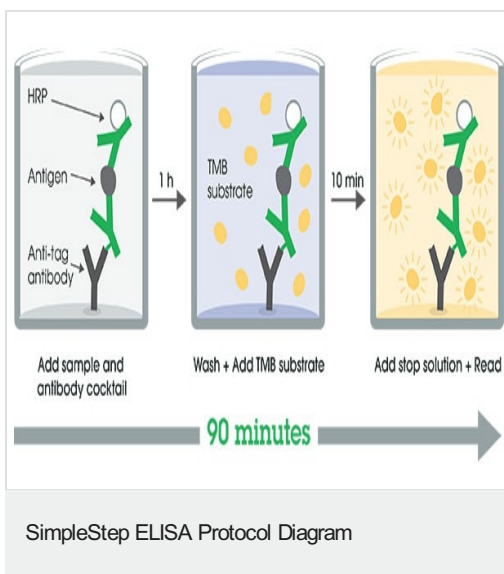
Belongs to the IRF family.

Contains 1 IRF tryptophan pentad repeat DNA-binding domain.

Cellular localization

Nucleus.

Images



SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.

Powered by
recombinant antibodies



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



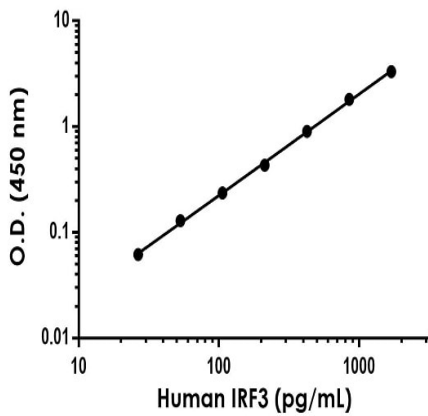
Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

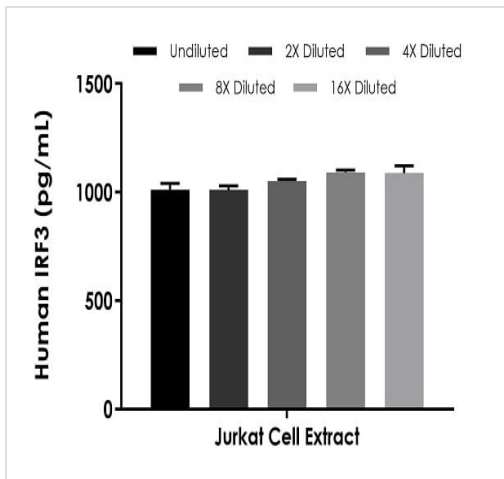
Recombinant Antibody Benefits

To learn more about the advantages of recombinant antibodies see [here](#).



The IRF3 standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.

Example of human IRF3 standard curve in 1X Cell Extraction Buffer PTR.



The concentrations of IRF3 were measured in duplicate and interpolated from the IRF3 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean IRF3 concentration was determined to be 1051 pg/mL.

Interpolated concentrations of native IRF3 in human Jurkat cell extracts based on a 20 µg/mL extract load.

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