

Product datasheet

Human Interferon Alpha 2 ELISA Kit ab233622

SimpleStep ELISA[®]

[3 Images](#)

Overview

Product name Human Interferon Alpha 2 ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Spiked serum	3			2.7%

Inter-assay

Sample	n	Mean	SD	CV%
Spiked serum	8			9.3%

Sample type Serum, Heparin Plasma, EDTA Plasma, Citrate Plasma

Assay type Sandwich (quantitative)

Sensitivity 56.04 pg/ml

Range 187.5 pg/ml - 12000 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Serum	103	99% - 109%
Cell culture media	106	100% - 116%
Heparin Plasma	104	94% - 108%
EDTA Plasma	87	80% - 93%
Citrate Plasma	103	102% - 103%

Assay time 1h 30m

Assay duration

One step assay

Species reactivity**Reacts with:** Human**Product overview**

Interferon Alpha 2 *in vitro* SimpleStep ELISA[®] (Enzyme-Linked Immunosorbent Assay) kit is designed for the quantitative measurement of Interferon Alpha 2 protein in human sample 1, sample 2 and sample 3.

The SimpleStep ELISA[®] employs an affinity tag labeled capture antibody and a reporter conjugated detector antibody which immunocapture the sample analyte in solution. This entire complex (capture antibody/analyte/detector antibody) is in turn immobilized via immunoaffinity of an anti-tag antibody coating the well. To perform the assay, samples or standards are added to the wells, followed by the antibody mix. After incubation, the wells are washed to remove unbound material. TMB substrate is added and during incubation is catalyzed by HRP, generating blue coloration. This reaction is then stopped by addition of Stop Solution completing any color change from blue to yellow. Signal is generated proportionally to the amount of bound analyte and the intensity is measured at 450 nm. Optionally, instead of the endpoint reading, development of TMB can be recorded kinetically at 600 nm.

Interferon-alpha (IFN-alpha) 2 is produced by macrophages and is known to have antiviral activities. IFN-alpha 2 is a member of the type I interferon family which share a common cell surface receptor composed of two subunits, a 100 kDa ligand-binding subunit (IFN-alpha R2) and a 125 kDa ligand binding and signal transduction subunit (IFN-alpha R1) that is involved both in ligand binding and signal transduction. IFN-alpha has both anti-viral and immunomodulatory activities on target cells. Genetically, mouse and rat both share 62 percent sequence homology with human IFN-alpha 2.

Tested applications**Suitable for:** Sandwich ELISA**Platform**

Microplate (12 x 8 well strips)

Properties**Storage instructions**

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

Components	1 x 96 tests
10X Human Interferon Alpha 2 Capture Antibody	1 x 600µl
10X Human Interferon Alpha 2 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 5BI	1 x 6ml
Human Interferon Alpha 2 Lyophilized Purified Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit

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

Function Produced by macrophages, IFN-alpha have antiviral activities.

Sequence similarities Belongs to the alpha/beta interferon family.

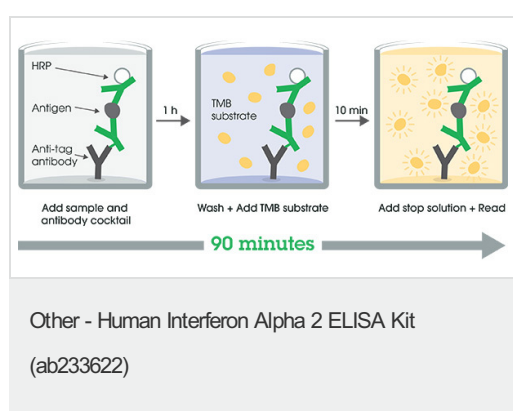
Cellular localization Secreted.

Applications

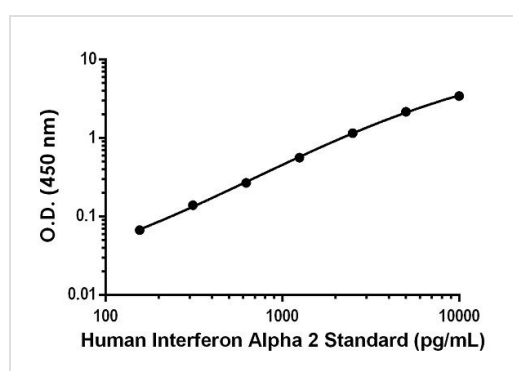
Our [Abpromise guarantee](#) covers the use of **ab233622** in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Sandwich ELISA		Use at an assay dependent concentration.

Images

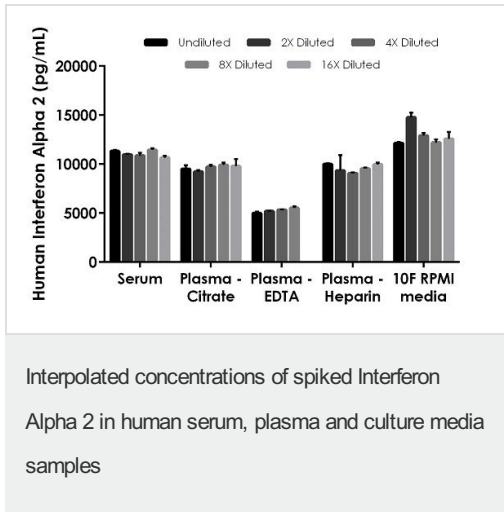


SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.

Example of human Interferon Alpha 2 standard curve in Sample Diluent NS



The concentrations of Interferon Alpha 2 were measured in duplicates, interpolated from the Interferon Alpha 2 standard curves.

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