# abcam

### Product datasheet

## Human IL-12 p40 + IL-12 p70 ELISA Kit ab46037

1 References 1 Image

Overview

**Product name** Human IL-12 p40 + IL-12 p70 ELISA Kit

**Detection method**Colorimetric

Precision

Sample	n	Mean	SD	CV%
Overall				3.7%

Inter-assay

Intra-assav

Sample	n	Mean	SD	CV%
Sample 1	18	2277pg/ml	160	7%
Sample 2	18	1199pg/ml	108	9%
Sample 3	18	479pg/ml	49	10.3%
Sample 4	18	1488pg/ml	123	8.3%
Sample 5	18	826pg/ml	106	12.8%

Sample type Cell culture supernatant, Serum, Plasma

Assay type Sandwich (quantitative)

Sensitivity < 20 pg/ml

**Range** 62.5 pg/ml - 2000 pg/ml

Recovery 100 %
Assay time 1h 45m

Assay duration Multiple steps standard assay

Species reactivity Reacts with: Human

Product overview Abcam's IL-12 Human in vitro ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for

the quantitative measurement of IL-12 in Human serum, plasma, buffered solutions and

supernatants.

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A monoclonal antibody specific for IL-12 has been coated onto the wells of the microtiter strips provided. Samples, including standards of known IL-12 concentrations, control specimens or unknowns are pipetted into these wells. During the first incubation, the standards or samples and a biotinylated monoclonal antibody specific for IL-12 are simultaneously incubated. After washing, the enzyme Streptavidin-HRP, that binds the biotinylated antibody is added, incubated and washed. A TMB substrate solution is added which acts on the bound enzyme to induce a colored reaction product. The intensity of this colored product is directly proportional to the concentration of IL-12 present in the samples.

This kit will recognize both endogenous and recombinant Human IL-12, and the Human Il-12 p40 monomer, dimer or heterodimer p70 (p40 + p35) forms of the molecule.

#### **Platform**

Microplate

#### **Properties**

#### Storage instructions

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

Components	Identifier	2 x 96 tests	1 x 96 tests
10X Standard Diluent Buffer	Black	1 x 25ml	1 x 15ml
200X Wash Buffer	White	2 x 10ml	1 x 10ml
Biotinylated Antibody Diluent	Red	1 x 13ml	1 x 7ml
Biotinylated anti-IL12	Red	2 x 0.4ml	1 x 0.4ml
Chromogen TMB Substrate Solution		1 x 24ml	1 x 11ml
HRP Diluent	Red	1 x 23ml	1 x 12ml
IL-12 Control	Silver	4 vials	2 vials
IL-12 Microplate (12 x 8 well strips)		2 units	1 unit
IL-12 Standard (Lyophilized)	Yellow	4 vials	2 vials
Plastic Plate Covers		4 units	2 units
Standard Diluent (Serum)		2 x 7ml	1 x 7ml
Stop Reagent	Black	2 x 11ml	1 x 11ml
Streptavidin-HRP		4 x 5µl	2 x 5µl

#### **Function**

Cytokine that can act as a growth factor for activated T and NK cells, enhance the lytic activity of NK/lymphokine-activated killer cells, and stimulate the production of IFN-gamma by resting PBMC.

Associates with IL23A to form the IL-23 interleukin, a heterodimeric cytokine which functions in innate and adaptive immunity. IL-23 may constitute with IL-17 an acute response to infection in peripheral tissues. IL-23 binds to a heterodimeric receptor complex composed of IL12RB1 and

IL23R, activates the Jak-Stat signaling cascade, stimulates memory rather than naive T-cells and promotes production of proinflammatory cytokines. IL-23 induces autoimmune inflammation and thus may be responsible for autoimmune inflammatory diseases and may be important for tumorigenesis.

**Involvement in disease**Mendelian susceptibility to mycobacterial disease

Psoriasis 11

**Sequence similarities** Belongs to the type I cytokine receptor family. Type 3 subfamily.

Contains 1 fibronectin type-III domain.

Contains 1 lg-like C2-type (immunoglobulin-like) domain.

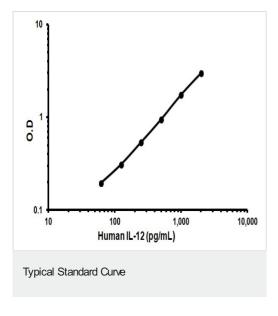
Post-translational modifications

Known to be C-mannosylated in the recombinant protein; it is not yet known for sure if the wild-

type protein is also modified.

Cellular localization Secreted.

#### **Images**



Representative Standard Curve using ab46037

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