

Human IL-37 ELISA Kit ab213798

2 References 1 Image

Overview

Product name	Human IL-37 ELISA Kit																																											
Detection method	Colorimetric																																											
Precision	<div>Intra-assay</div> <table><tr><th>Sample</th><th>n</th><th>Mean</th><th>SD</th><th>CV%</th></tr><tr><td>1</td><td>16</td><td>178pg/ml</td><td>7.3</td><td>4.1%</td></tr><tr><td>2</td><td>16</td><td>304pg/ml</td><td>11.86</td><td>3.9%</td></tr><tr><td>3</td><td>16</td><td>569pg/ml</td><td>30.2</td><td>5.3%</td></tr></table> <div>Inter-assay</div> <table><tr><th>Sample</th><th>n</th><th>Mean</th><th>SD</th><th>CV%</th></tr><tr><td>1</td><td>24</td><td>216pg/ml</td><td>12.3</td><td>5.7%</td></tr><tr><td>2</td><td>24</td><td>365pg/ml</td><td>15.33</td><td>4.2%</td></tr><tr><td>3</td><td>24</td><td>610pg/ml</td><td>39.04</td><td>6.4%</td></tr></table>				Sample	n	Mean	SD	CV%	1	16	178pg/ml	7.3	4.1%	2	16	304pg/ml	11.86	3.9%	3	16	569pg/ml	30.2	5.3%	Sample	n	Mean	SD	CV%	1	24	216pg/ml	12.3	5.7%	2	24	365pg/ml	15.33	4.2%	3	24	610pg/ml	39.04	6.4%
Sample	n	Mean	SD	CV%																																								
1	16	178pg/ml	7.3	4.1%																																								
2	16	304pg/ml	11.86	3.9%																																								
3	16	569pg/ml	30.2	5.3%																																								
Sample	n	Mean	SD	CV%																																								
1	24	216pg/ml	12.3	5.7%																																								
2	24	365pg/ml	15.33	4.2%																																								
3	24	610pg/ml	39.04	6.4%																																								
Sample type	Cell culture supernatant, Serum, Cell Lysate, Hep Plasma, EDTA Plasma																																											
Assay type	Sandwich (quantitative)																																											
Sensitivity	< 10 pg/ml																																											
Range	15.6 pg/ml - 1000 pg/ml																																											
Assay time	3h 30m																																											
Assay duration	Multiple steps standard assay																																											
Species reactivity	<b>Reacts with:</b> Human																																											
Product overview	<p>The Human IL-37 Enzyme-Linked Immunosorbent Assay (ELISA) kit (ab213798) is designed for the quantitative measurement of Human IL-37 in cell culture supernatants, cell lysates, serum and plasma (heparin, EDTA).</p> <p>The ELISA kit is based on standard sandwich enzyme-linked immune-sorbent assay technology.</p>																																											

A polyclonal antibody from goat specific for IL-37 has been pre-coated onto 96-well plates. Standards (Expression system for standard: E.coli; Immunogen sequence: V46-D218) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for IL-37 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex is added and unbound conjugates are washed away with PBS or TBS buffer. HRP substrate TMB is used to visualize HRP enzymatic reaction. TMB is catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the Human IL-37 amount of sample captured in plate.

**Notes** Interleukin 37 also named IL1F7, is a protein that in humans is encoded by the IL1F7 gene. The protein encoded by this gene is a member of the interleukin 1 cytokine family, and it is mapped to 2q13. *In vitro* expression analysis showed that IL-37 was a secretory protein. IL-37 could play an important role in the link between innate and adaptive immunity and may be useful for tumor immunotherapy. Meanwhile, IL-37 inhibits the production of inflammatory cytokines in peripheral blood mononuclear cells of patients with systemic lupus erythematosus. In addition, IL-37 emerged as a dual-function cytokine with intra- and extracellular properties for suppressing innate inflammation. Furthermore, IL-37 is a new anti-inflammatory cytokine that plays an important role in protecting against tissue injury during infections via limiting immune and inflammatory reactions.

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

## Properties

**Storage instructions** Store at -20°C. Please refer to protocols.

Components	Identifier	1 x 96 tests	1 x 96 tests
ABC Diluent Buffer	Blue Cap	1 x 12ml	1 x 12ml
Adhesive Plate Seal		4 units	4 units
Antibody Diluent Buffer	Green Cap	1 x 12ml	1 x 12ml
Anti-Human IL-37 coated Microplate (12 x 8 wells)		1 unit	1 unit
Avidin-Biotin-Peroxidase Complex (ABC)		1 x 100µl	1 x 100µl
Biotinylated anti- human IL-37 antibody		1 x 100µl	1 x 100µl
Lyophilized recombinant human IL-37 standard		2 vials	2 vials
Sample Diluent Buffer	Green Cap	1 x 30ml	1 x 30ml
TMB Color Developing Agent	Black Cap	1 x 10ml	1 x 10ml
TMB Stop Solution	Yellow Cap	1 x 10ml	1 x 10ml
Wash Buffer (25X)		1 x 20ml	1 x 20ml

**Function** Suppressor of innate inflammatory and immune responses involved in curbing excessive inflammation. This function requires SMAD3. Suppresses, or reduces, proinflammatory cytokine production, including IL1A and IL6, as well as CCL12, CSF1, CSF2, CXCL13, IL1B, IL23A and IL1RN, but spares anti-inflammatory cytokines. Inhibits dendritic cell activation.

### Tissue specificity

In general, low constitutive expression, if any, in healthy tissues; high expression in inflammatory counterparts, including in synovial tissues from individuals with active rheumatoid arthritis. Isoform A, isoform B and isoform C are expressed in testis, colon, placenta, lung and lymph node. Isoform D and isoform E were found only in testis and bone marrow. Whereas only isoform A is found in brain, only isoform B in kidney and only isoform C in heart.

### Sequence similarities

Belongs to the IL-1 family.

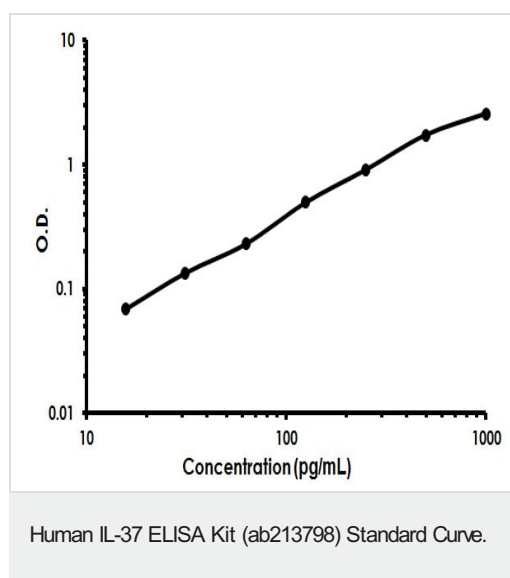
### Post-translational modifications

Proteolytically converted to the mature form by CASP1.

### Cellular localization

Cytoplasm > cytosol. Nucleus. Secreted. Stimulation with IL1B leads to colocalization with SMAD3 mostly in perinuclear regions. Only the CASP1-cleaved mature form translocates into the nucleus upon LPS stimulation.

## Images



Human IL-37 ELISA Kit (ab213798) Standard Curve.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

## Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

## Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors