# .-online.com antibodies

## Datasheet for ABIN625016 IL18BP ELISA Kit

Image



#### Overview

| Quantity:                | 96 tests       |
|--------------------------|----------------|
| Target:                  | IL18BP         |
| Reactivity:              | Human          |
| Method Type:             | Sandwich ELISA |
| Detection Range:         | 20-18000 pg/mL |
| Minimum Detection Limit: | 20 pg/mL       |
| Application:             | ELISA          |

## Product Details

| Purpose:           | Human IL-18 BP alpha ELISA Kit for cell culture supernatants, plasma, and serum samples.  |
|--------------------|---|
| Sample Type:       | Plasma, Cell Culture Supernatant, Serum   |
| Analytical Method: | Quantitative  |
| Detection Method:  | Colorimetric  |
| Specificity:       | This ELISA kit shows no cross-reactivity with any of the cytokines tested: Human Angiogenin,<br>BDNF, BLC, ENA-78, FGF-4, IL-1 alpha, IL-1 beta, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-11, IL-<br>12 p70, IL-12 p40, IL-13, IL-15, I-309, IP-10, G-CSF, GM-CSF, IFN-gamma, Leptin (OB), MCP-1,<br>MCP-2, MCP-3, MDC, MIP-1 alpha, MIP-1 beta, MIP-1 delta, PARC, PDGF, RANTES, SCF, TARC,<br>TGF-beta, TIMP-1, TIMP-2, TNF-alpha, TNF-beta, TPO, VEGF. |
| Sensitivity:       | 20 pg/mL  |
| Characteristics:   | Strip plates and additional reagents allow for use in multiple experiments  |

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 1/5 | Product datasheet for ABIN625016 | 11/30/2023 | Copyright antibodies-online. All rights reserved.

|                        | <ul> <li>Quantitative protein detection</li> <li>Establishes normal range</li> <li>The best products for confirmation of antibody array data</li> </ul>  |
|------------------------|--|
| Components:            | <ul> <li>Pre-Coated 96-well Strip Microplate</li> <li>Wash Buffer</li> <li>Stop Solution</li> <li>Assay Diluent(s)</li> <li>Lyophilized Standard</li> <li>Biotinylated Detection Antibody</li> <li>Streptavidin-Conjugated HRP</li> <li>TMB One-Step Substrate</li> </ul>  |
| Material not included: | <ul> <li>Distilled or deionized water</li> <li>Precision pipettes to deliver 2 µL to 1 µL volumes</li> <li>Adjustable 1-25 µL pipettes for reagent preparation</li> <li>100 µL and 1 liter graduated cylinders</li> <li>Tubes to prepare standard and sample dilutions</li> <li>Absorbent paper</li> <li>Microplate reader capable of measuring absorbance at 450nm</li> <li>Log-log graph paper or computer and software for ELISA data analysis</li> </ul> |

## Target Details

| Target:           | IL18BP  |
|-------------------|---|
| Alternative Name: | IL-18 BP alpha (IL18BP Products)  |
| Background:       | Interleukin 18 binding protein (IL-18 BP) is a secreted glycoprotein, which may function as a natural anti-inflammatory and immunosuppressive molecule neutralizing the effects of high IL18 levels during inflammation. It can prevent IL18 receptor binding and inhibits the production of IFN-gamma induced by IL18 in KG-1 cells. Aizawa et al (1999) have purified a mouse IL-18 binding protein and subsequently cloned the murine and human cDNA. Human and murine IL18BP share 60 % amino acid similarity. The Human IL-18 BPa ELISA (Enzyme-Linked Immunosorbent Assay) kit is an in vitro enzyme-linked immunosorbent assay for the quantitative measurement of human IL-18 BPa in serum, plasma, cell culture supernatants and urine. This assay employs an antibody specific for human IL-18 BPa present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti-human IL-18 BPa antibody is added. After washing away unbound biotinylated antibody, HRP-conjugated streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is |

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 2/5 | Product datasheet for ABIN625016 | 11/30/2023 | Copyright antibodies-online. All rights reserved.

### Application Details

**Target Details** 

| Application Notes:   | Recommended Dilution for serum and plasma samples3 fold  |
|----------------------|--|
| Sample Volume:       | 100 µL   |
| Plate:               | Pre-coated   |
| Protocol:            | 1. Prepare all reagents, samples and standards as instructed in the manual.                              |
|                      | 2. Add 100 $\mu L$ of standard or sample to each well.   |
|                      | 3. Incubate 2.5 h at RT or O/N at 4 °C.  |
|                      | 4. Add 100 $\mu$ L of prepared biotin antibody to each well.   |
|                      | 5. Incubate 1 h at RT.   |
|                      | 6. Add 100 $\mu$ L of prepared Streptavidin solution to each well.                                       |
|                      | 7. Incubate 45 min at RT.  |
|                      | 8. Add 100 µL of TMB One-Step Substrate Reagent to each well.  |
|                      | 9. Incubate 30 min at RT.  |
|                      | 10. Add 50 μL of Stop Solution to each well.<br>11. Read at 450 nm immediately.                          |
| Reagent Preparation: | 1. Bring all reagents and samples to room temperature (18-25°C) before use. 2. Sample dilution           |
|                      | If your samples need to be diluted, Assay Diluent A (Item D) is used for dilution of                     |
|                      | serum/plasma samples, and Assay Diluent B (Item E) is used for dilution of culture                       |
|                      | supernatants and urine. 3. Assay Diluent B should be diluted 5-fold with deionized or distilled          |
|                      | water. 4. Preparation of standard: Briefly spin the vial of Item C. Add 400 $\mu I$ Assay Diluent A (for |
|                      | serum/plasma samples) or 1x Assay Diluent B (for cell culture medium and urine) into Item C              |
|                      | vial to prepare a 20 ng/ml standard. Dissolve the powder thoroughly by a gentle mix. Add 8 $\mu l$       |
|                      | IL-18 standard from the vial of Item C, into a tube with 992.0 $\mu$ l Assay Diluent A or 1x Assay       |
|                      | Diluent B to prepare a 160 pg/ml stock standard solution. Pipette 400 $\mu$ l Assay Diluent A or 1x      |
|                      | Assay Diluent B into each tube. Use the stock standard solution to produce a dilution series             |
|                      | (shown below). Mix each tube thoroughly before the next transfer. Gently vortex to mix. Assay            |
|                      | Diluent A or 1x Assay Diluent B serves as the zero standard (0 pg/ml). 5. If the Wash                    |
|                      | Concentrate (20x) (Item B) contains visible crystals, warm to room temperature and mix gently            |
|                      | until dissolved. Dilute 20 ml of Wash Buffer Concentrate into deionized or distilled water to yield      |

400 ml of 1x Wash Buffer. 6. Briefly spin the Detection Antibody vial (Item F) before use. Add 100  $\mu$ l of 1x Assay Diluent B into the vial to prepare a detection antibody concentrate. Pipette up and down to mix gently (the concentrate can be stored at 4°C for 5 days). The detection antibody concentrate should be diluted 80-fold with 1x Assay Diluent B and used in step 4 of Part VI Assay Procedure. 7. Briefly spin the HRP-Streptavidin concentrate vial (Item G) and pipette up and down to mix gently before use. HRP-Streptavidin concentrate should be diluted 10,000-fold with 1x Assay Diluent B. For example: Briefly spin the vial (Item G) and pipette up and down to mix gently . Add 2  $\mu$ l of HRP-Streptavidin concentrate into a tube with 198.0  $\mu$ l 1x Assay Diluent B to prepare a 100-fold diluted HRP-Streptavidin solution (do not store the diluted solution for next day use). Mix through and then pipette 120  $\mu$ l of prepared 100-fold diluted HRP-Streptavidin solution.

Assay Procedure: 1. Bring all reagents and samples to room temperature (18 - 25°C) before use. It is recommended that all standards and samples be run at least in duplicate. 2. Add 100 µl of each standard (see Reagent Preparation step 2) and sample into appropriate wells. Cover well and incubate for 2.5 hours at room temperature or over night at 4°C with gentle shaking. 3. Discard the solution and wash 4 times with 1x Wash Solution. Wash by filling each well with Wash Buffer (300 µl) using a multi-channel Pipette or autowasher. Complete removal of liquid at each step is essential to good performance. After the last wash, remove any remaining Wash Buffer by aspirating or decanting. Invert the plate and blot it against clean paper towels. 4. Add 100 µl of 1x prepared biotinylated antibody (Reagent Preparation step 6) to each well. Incubate for 1 hour at room temperature with gentle shaking. 5. Discard the solution. Repeat the wash as in step 3. 6. Add 100 µl of prepared Streptavidin solution (see Reagent Preparation step 7) to each well. Incubate for 45 minutes at room temperature with gentle shaking. 7. Discard the solution. Repeat the wash as in step 3. 8. Add 100 µl of TMB One-Step Substrate Reagent (Item H) to each well. Incubate for 30 minutes at room temperature in the dark with gentle shaking. 9. Add 50 µl of Stop Solution (Item I) to each well. Read at 450 nm immediately. Calculation of Results: Calculate the mean absorbance for each set of duplicate standards, controls and samples, and subtract the average zero standard optical density. Plot the standard curve on log-log graph paper or using Sigma plot software, with standard concentration on the x-axis and absorbance on the y-axis. Draw the best-fit straight line through the standard points.

Restrictions:

For Research Use only

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 4/5 | Product datasheet for ABIN625016 | 11/30/2023 | Copyright antibodies-online. All rights reserved.

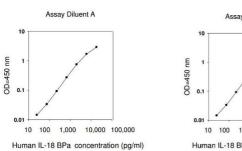
## Handling

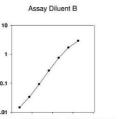
| Storage:         | -20 °C   |
|------------------|--|
| Storage Comment: | The entire kit may be stored at -20°C for up to 1 year from the date of shipment. Avoid repeated freeze-thaw cycles. The kit may be stored at 4°C for up to 6 months. For extended storage, it is recommended to store at -80°C. |
| Expiry Date:     | 6 months   |

**ELISA** 

Image 1.

#### Images





10 100 1,000 10,000 100,000 Human IL-18 BPa concentration (pg/ml)

#### Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 5/5 | Product datasheet for ABIN625016 | 11/30/2023 | Copyright antibodies-online. All rights reserved.