

## Human IL-27 Antibody Pair Set

|                    |  |                     |       |
|--------------------|--|---------------------|-------|
| <b>Catalog No.</b> | E-KAB-0225   | <b>Applications</b> | ELISA |
| <b>Synonyms</b>    | IL-27, IL-27A, IL27p28, IL30, MGC71873, p28,IL-27B |                     |       |

### Kit components & Storage

| Title                                   | Specifications | Storage   |
|---|----------------|---|
| Human IL-27 Capture Antibody            | 1 vial, 100 µg | Store at -20°C for one year.<br>Avoid freeze / thaw cycles. |
| Human IL-27 Detection Antibody (Biotin) | 1 vial, 50 µL  | Store at -20°C for one year.<br>Avoid freeze / thaw cycles. |

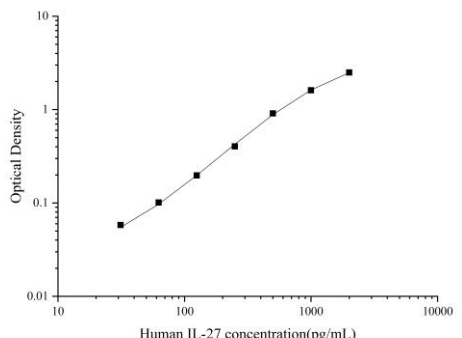
**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Product Information

| Items                 |               | Characteristic (E-KAB-0225)                      |   |
|-----------------------|---------------|--|---|
|                       |               | Human IL-27 Capture Antibody                     | Human IL-27 Detection Antibody (Biotin)                                 |
| Immunogen Information | Immunogen     | Recombinant Human IL-27 protein                  | Recombinant Human IL-27 protein   |
|                       | Swissprot     | Q8NEV9   |   |
| Product details       | Reactivity    | Human  | Human   |
|                       | Host          | Goat   | Goat  |
|                       | Conjugation   | Unconjugated                                     | Biotin  |
|                       | Concentration | 0.5mg/mL   | /   |
|                       | Buffer        | PBS with 0.04% Proclin 300, 50% glycerol, pH 7.4 | PBS with 0.04% Proclin 300, 1% protective protein, 50% glycerol, pH 7.4 |
|                       | Purify        | Antigen Affinity                                 | Antigen Affinity  |
|                       | Specificity   | Detects Human IL-27 in ELISAs.                   |   |

## Applications

### Human IL-27 Sandwich ELISA Assay:

|                                   | Recommended Concentration/Dilution | Reagent                                 | Images  |                                   |                 |    |      |     |     |      |     |       |     |
|-----------------------------------|------------------------------------|---|---|-----------------------------------|-----------------|----|------|-----|-----|------|-----|-------|-----|
| ELISA Capture                     | 0.5-4µg/mL                         | Human IL-27 Capture Antibody            |  <p>The graph is a log-log plot of Optical Density versus Human IL-27 concentration (pg/mL). The y-axis (Optical Density) ranges from 0.01 to 10, and the x-axis (Human IL-27 concentration) ranges from 10 to 10000. The data points form a straight line, indicating a linear relationship between the log of concentration and the log of optical density.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Human IL-27 concentration (pg/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>0.05</td> </tr> <tr> <td>100</td> <td>0.2</td> </tr> <tr> <td>1000</td> <td>0.8</td> </tr> <tr> <td>10000</td> <td>3.0</td> </tr> </tbody> </table> | Human IL-27 concentration (pg/mL) | Optical Density | 10 | 0.05 | 100 | 0.2 | 1000 | 0.8 | 10000 | 3.0 |
| Human IL-27 concentration (pg/mL) | Optical Density                    |   |   |                                   |                 |    |      |     |     |      |     |       |     |
| 10                                | 0.05                               |   |   |                                   |                 |    |      |     |     |      |     |       |     |
| 100                               | 0.2                                |   |   |                                   |                 |    |      |     |     |      |     |       |     |
| 1000                              | 0.8                                |   |   |                                   |                 |    |      |     |     |      |     |       |     |
| 10000                             | 3.0                                |   |   |                                   |                 |    |      |     |     |      |     |       |     |
| ELISA Detection                   | 1:1000-1:10000                     | Human IL-27 Detection Antibody (Biotin) |   |                                   |                 |    |      |     |     |      |     |       |     |

**Note:** This standard curve is only for demonstration purposes. A standard curve should be generated for each assay!

## Background

IL-27, a member of IL-12/IL-23 heterodimeric family of cytokines, has pleiotropic properties that can enhance or limit immune responses. IL-27 is a heterodimeric cytokine composed of two subunits: IL-27a and IL-27b. IL-27 acts on various cell types, including T cells, B cells, macrophages, dendritic cells, natural killer (NK) cells and non-hematopoietic cells. IL-27 plays a critical role in the early regulation of T helper type 1 initiation, and enhances proliferation of naive CD4+T cells and naive B cells. It, however, also exerts anti-inflammatory functions by inhibiting the development of Th17 cells and inducing IL-10 producing type 1 regulatory T cells. IL-27 is a potentially promising cytokine for therapeutic approaches on various human diseases.