

## Human GDF15 Antibody Pair Set

|                    |  |                     |       |
|--------------------|--|---------------------|-------|
| <b>Catalog No.</b> | E-KAB-0029   | <b>Applications</b> | ELISA |
| <b>Synonyms</b>    | GDF-15, MIC-1, MIC1, NAG-1, PDF, PLAB, PTGFB, TGF-PL |                     |       |

### Kit components & Storage

| Title                                   | Specifications | Storage   |
|---|----------------|---|
| Human GDF15 Capture Antibody            | 1 vial, 100 µg | Store at -20°C for one year.<br>Avoid freeze / thaw cycles. |
| Human GDF15 Detection Antibody (Biotin) | 1 vial, 50 µL  | Store at -20°C for one year.<br>Avoid freeze / thaw cycles. |

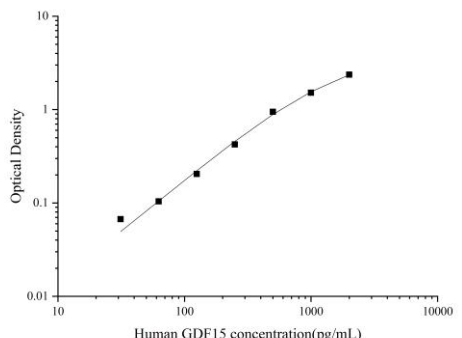
**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Product Information

| Items                 |               | Characteristic (E-KAB-0029)                      |   |
|-----------------------|---------------|--|---|
|                       |               | Human GDF15 Capture Antibody                     | Human GDF15 Detection Antibody (Biotin)                                 |
| Immunogen Information | Immunogen     | Recombinant Human GDF15 protein                  | Recombinant Human GDF15 protein   |
|                       | Swissprot     | Q99988   |   |
| 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 GDF15 in ELISAs.                   |   |

## Applications

### Human GDF15 Sandwich ELISA Assay:

|                                   | Recommended Concentration/Dilution | Reagent                                 | Images  |                                   |                 |    |      |    |     |     |     |     |     |     |     |      |     |
|-----------------------------------|------------------------------------|---|---|-----------------------------------|-----------------|----|------|----|-----|-----|-----|-----|-----|-----|-----|------|-----|
| ELISA Capture                     | 0.5-4µg/mL                         | Human GDF15 Capture Antibody            |  <p>The graph is a log-log plot of Optical Density versus Human GDF15 concentration (pg/mL). The y-axis (Optical Density) ranges from 0.01 to 10, and the x-axis (Human GDF15 concentration) ranges from 10 to 10000. Six data points are plotted, showing a clear upward trend that appears linear on this scale.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Human GDF15 concentration (pg/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr> <td>20</td> <td>0.05</td> </tr> <tr> <td>50</td> <td>0.1</td> </tr> <tr> <td>100</td> <td>0.2</td> </tr> <tr> <td>200</td> <td>0.4</td> </tr> <tr> <td>500</td> <td>1.0</td> </tr> <tr> <td>1000</td> <td>2.0</td> </tr> </tbody> </table> | Human GDF15 concentration (pg/mL) | Optical Density | 20 | 0.05 | 50 | 0.1 | 100 | 0.2 | 200 | 0.4 | 500 | 1.0 | 1000 | 2.0 |
| Human GDF15 concentration (pg/mL) | Optical Density                    |   |   |                                   |                 |    |      |    |     |     |     |     |     |     |     |      |     |
| 20                                | 0.05                               |   |   |                                   |                 |    |      |    |     |     |     |     |     |     |     |      |     |
| 50                                | 0.1                                |   |   |                                   |                 |    |      |    |     |     |     |     |     |     |     |      |     |
| 100                               | 0.2                                |   |   |                                   |                 |    |      |    |     |     |     |     |     |     |     |      |     |
| 200                               | 0.4                                |   |   |                                   |                 |    |      |    |     |     |     |     |     |     |     |      |     |
| 500                               | 1.0                                |   |   |                                   |                 |    |      |    |     |     |     |     |     |     |     |      |     |
| 1000                              | 2.0                                |   |   |                                   |                 |    |      |    |     |     |     |     |     |     |     |      |     |
| ELISA Detection                   | 1:1000-1:10000                     | Human GDF15 Detection Antibody (Biotin) |   |                                   |                 |    |      |    |     |     |     |     |     |     |     |      |     |

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

## Background

Bone morphogenetic proteins (e.g., BMP9; MIM 605120) are members of the transforming growth factor-beta (see TGFB1; MIM 190180) superfamily and regulate tissue differentiation and maintenance. They are synthesized as precursor molecules that are processed at a dibasic cleavage site to release C-terminal domains containing a characteristic motif of 7 conserved cysteines in the mature protein. GDF15 mRNA is most abundant in the liver, with lower levels seen in some other tissues. Its expression in liver can be significantly up-regulated in during injury of organs such as liver, kidney, heart and lung.