

Human BMPR2 Antibody Pair Set

| | | | |
|--------------------|--|---------------------|-------|
| Catalog No. | E-KAB-0197 | Applications | ELISA |
| Synonyms | BMPR-II, BMPR3, BMR2, BRK-3, PPH1, T-ALK | | |

Kit components & Storage

| Title | Specifications | Storage |
|---|----------------|---|
| Human BMPR2 Capture Antibody | 1 vial, 100 µg | Store at -20°C for one year. Avoid freeze / thaw cycles. |
| Human BMPR2 Detection Antibody (Biotin) | 1 vial, 50 µL | Store at -20°C for one year. Avoid freeze / thaw cycles. |

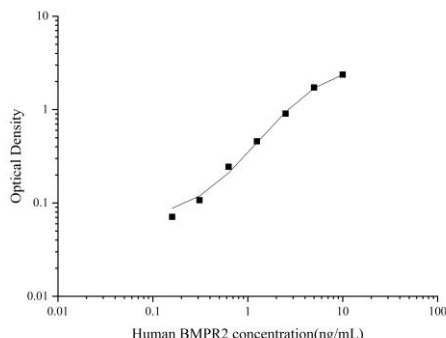
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

| Items | | Characteristic (E-KAB-0197) | |
|-----------------------|---------------|--|---|
| | | Human BMPR2 Capture Antibody | Human BMPR2 Detection Antibody (Biotin) |
| Immunogen Information | Immunogen | Recombinant Human BMPR2 protein | Recombinant Human BMPR2 protein |
| | Swissprot | Q13873 | |
| Product details | Reactivity | Human | Human |
| | Host | Mouse | Rabbit |
| | 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 | Protein A or G | Protein A & Antigen Affinity |
| | Specificity | Detects Human BMPR2 in ELISAs. | |

Applications

Human BMPR2 Sandwich ELISA Assay:

| | Recommended Concentration/Dilution | Reagent | Images | | | | | | | | | | | | | | | | |
|-----------------------------------|------------------------------------|---|---|-----------------------------------|-----------------|-----|------|-----|-----|-----|-----|---|-----|---|-----|---|-----|----|-----|
| ELISA Capture | 0.5-4µg/mL | Human BMPR2 Capture Antibody |  <p>The graph displays a standard curve for the Human BMPR2 Sandwich ELISA Assay. The x-axis represents Human BMPR2 concentration in ng/mL, ranging from 0.01 to 100 on a logarithmic scale. The y-axis represents Optical Density, ranging from 0.01 to 10 on a logarithmic scale. The data points show a clear upward trend, indicating that as the concentration of Human BMPR2 increases, the optical density also increases.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Human BMPR2 concentration (ng/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr> <td>0.1</td> <td>0.05</td> </tr> <tr> <td>0.2</td> <td>0.1</td> </tr> <tr> <td>0.5</td> <td>0.2</td> </tr> <tr> <td>1</td> <td>0.4</td> </tr> <tr> <td>2</td> <td>0.8</td> </tr> <tr> <td>5</td> <td>1.5</td> </tr> <tr> <td>10</td> <td>2.5</td> </tr> </tbody> </table> | Human BMPR2 concentration (ng/mL) | Optical Density | 0.1 | 0.05 | 0.2 | 0.1 | 0.5 | 0.2 | 1 | 0.4 | 2 | 0.8 | 5 | 1.5 | 10 | 2.5 |
| Human BMPR2 concentration (ng/mL) | Optical Density | | | | | | | | | | | | | | | | | | |
| 0.1 | 0.05 | | | | | | | | | | | | | | | | | | |
| 0.2 | 0.1 | | | | | | | | | | | | | | | | | | |
| 0.5 | 0.2 | | | | | | | | | | | | | | | | | | |
| 1 | 0.4 | | | | | | | | | | | | | | | | | | |
| 2 | 0.8 | | | | | | | | | | | | | | | | | | |
| 5 | 1.5 | | | | | | | | | | | | | | | | | | |
| 10 | 2.5 | | | | | | | | | | | | | | | | | | |
| ELISA Detection | 1:1000-1:10000 | Human BMPR2 Detection Antibody (Biotin) | | | | | | | | | | | | | | | | | |

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

Background

This gene encodes a member of the bone morphogenetic protein (BMP) receptor family of transmembrane serine/threonine kinases. The ligands of this receptor are BMPs, which are members of the TGF-beta superfamily. BMPs are involved in endochondral bone formation and embryogenesis. These proteins transduce their signals through the formation of heteromeric complexes of two different types of serine (threonine) kinase receptors: type I receptors of about 50-55 kD and type II receptors of about 70-80 kD. Type II receptors bind ligands in the absence of type I receptors, but they require their respective type I receptors for signaling, whereas type I receptors require their respective type II receptors for ligand binding. Mutations in this gene have been associated with primary pulmonary hypertension, both familial and fenfluramine-associated, and with pulmonary venoocclusive disease.