



# Human Beta-type platelet-derived growth factor receptor(PDGFRB) ELISA kit

|                                     |                                                                                                                                                                                                                                                     |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Code</b>                 | CSB-EL017713HU                                                                                                                                                                                                                                      |
| <b>Protein Biological Process 2</b> | chemokine                                                                                                                                                                                                                                           |
| <b>Abbreviation</b>                 | PDGFRB                                                                                                                                                                                                                                              |
| <b>Protein Biological Process 1</b> | Immunity                                                                                                                                                                                                                                            |
| <b>Target Name</b>                  | platelet-derived growth factor receptor, beta polypeptide                                                                                                                                                                                           |
| <b>Uniprot No.</b>                  | P09619                                                                                                                                                                                                                                              |
| <b>Alias</b>                        | CD140B, JTK12, PDGFR, PDGFR1, CD140 antigen-like family member B PDGF-R-beta platelet-derived growth factor receptor beta                                                                                                                           |
| <b>Product Type</b>                 | ELISA Kit                                                                                                                                                                                                                                           |
| <b>Immunogen Species</b>            | Homo sapiens (Human)                                                                                                                                                                                                                                |
| <b>Protein Biological Process 3</b> | Chemotaxis                                                                                                                                                                                                                                          |
| <b>Sample Types</b>                 | serum, plasma, tissue homogenates                                                                                                                                                                                                                   |
| <b>Detection Range</b>              | 62.5 pg/mL-4000 pg/mL                                                                                                                                                                                                                               |
| <b>Sensitivity</b>                  | 15.6 pg/mL                                                                                                                                                                                                                                          |
| <b>Assay Time</b>                   | 1-5h                                                                                                                                                                                                                                                |
| <b>Sample Volume</b>                | 50-100ul                                                                                                                                                                                                                                            |
| <b>Detection Wavelength</b>         | 450 nm                                                                                                                                                                                                                                              |
| <b>Lead Time</b>                    | 3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.                                                                                                                                            |
| <b>Research Area</b>                | Signal Transduction                                                                                                                                                                                                                                 |
| <b>Gene Names</b>                   | PDGFRB                                                                                                                                                                                                                                              |
| <b>Tag Info</b>                     | quantitative                                                                                                                                                                                                                                        |
| <b>Protein Description</b>          | Sandwich                                                                                                                                                                                                                                            |
| <b>Description</b>                  | This Human PDGFRB ELISA Kit was designed for the quantitative measurement of Human PDGFRB protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 62.5 pg/mL-4000 pg/mL and the sensitivity is 15.6 pg/mL. |
| <b>Target Details</b>               | This gene encodes a cell surface tyrosine kinase receptor for members of the platelet-derived growth factor family. These growth factors are mitogens for cells                                                                                     |



of mesenchymal origin. The identity of the growth factor bound to a receptor monomer determines whether the functional receptor is a homodimer or a heterodimer, composed of both platelet-derived growth factor receptor alpha and beta polypeptides. This gene is flanked on chromosome 5 by the genes for granulocyte-macrophage colony-stimulating factor and macrophage-colony stimulating factor receptor; all three genes may be implicated in the 5-q syndrome. A translocation between chromosomes 5 and 12, that fuses this gene to that of the translocation, ETV6, leukemia gene, results in chronic myeloproliferative disorder with eosinophilia.

#### Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

#### Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of human PDGFRB in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

|     | Sample    | Serum(n=4) |
|-----|-----------|------------|
| 1:1 | Average % | 87         |
|     | Range %   | 84-91      |
| 1:2 | Average % | 102        |
|     | Range %   | 98-105     |
| 1:4 | Average % | 91         |
|     | Range %   | 85-94      |
| 1:8 | Average % | 94         |
|     | Range %   | 90-98      |

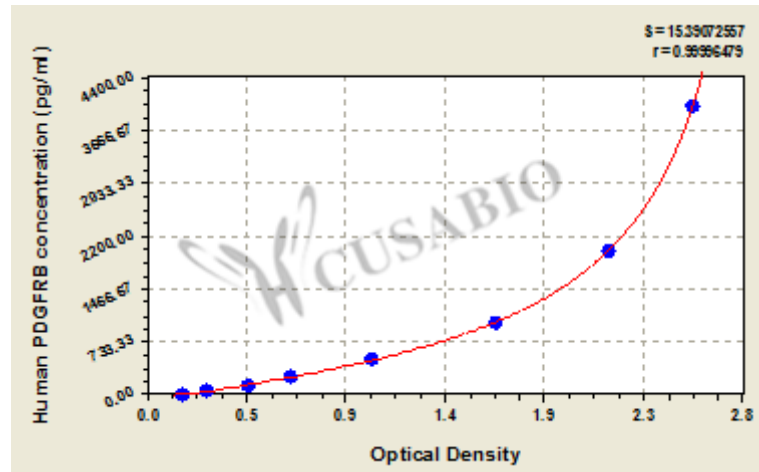
#### Recovery

The recovery of human PDGFRB spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

| Sample Type       | Average % Recovery | Range   |
|-------------------|--------------------|---------|
| Serum (n=5)       | 94                 | 88-97   |
| EDTA plasma (n=4) | 108                | 102-113 |

#### Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



| pg/ml | OD1   | OD2   | Average | Corrected |
|-------|-------|-------|---------|-----------|
| 4000  | 2.575 | 2.521 | 2.548   | 2.371     |
| 2000  | 2.128 | 2.184 | 2.156   | 1.979     |
| 1000  | 1.675 | 1.586 | 1.631   | 1.454     |
| 500   | 1.067 | 1.047 | 1.057   | 0.880     |
| 250   | 0.684 | 0.678 | 0.681   | 0.504     |
| 125   | 0.468 | 0.498 | 0.483   | 0.306     |
| 62.5  | 0.292 | 0.287 | 0.290   | 0.113     |
| 0     | 0.179 | 0.175 | 0.177   |           |

#### Msd

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