



# Mouse Platelet-Derived Growth Factor Soluble Receptor $\alpha$ , PDGFR- $\alpha$ ELISA kit

|                                     |                                                                                                                                                                                                                                                                  |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Code</b>                 | CSB-E04699m                                                                                                                                                                                                                                                      |
| <b>Protein Biological Process 2</b> | chemokine                                                                                                                                                                                                                                                        |
| <b>Abbreviation</b>                 | PDGFRA                                                                                                                                                                                                                                                           |
| <b>Protein Biological Process 1</b> | Immunity                                                                                                                                                                                                                                                         |
| <b>Target Name</b>                  | platelet-derived growth factor receptor, alpha polypeptide                                                                                                                                                                                                       |
| <b>Uniprot No.</b>                  | P26618                                                                                                                                                                                                                                                           |
| <b>Alias</b>                        | CD140A, MGC74795, PDGFR2, RHEPDGFRA, CD140 antigen-like family member A PDGF-R-alpha PDGFRA/BCR fusion platelet-derived growth factor receptor alpha rearranged-in-hypereosinophilia-platelet derived                                                            |
| <b>Product Type</b>                 | ELISA Kit                                                                                                                                                                                                                                                        |
| <b>Immunogen Species</b>            | Mus musculus (Mouse)                                                                                                                                                                                                                                             |
| <b>Protein Biological Process 3</b> | Chemotaxis                                                                                                                                                                                                                                                       |
| <b>Sample Types</b>                 | serum, plasma, tissue homogenates, cell lysates                                                                                                                                                                                                                  |
| <b>Detection Range</b>              | 15.6 pg/mL-1000 pg/mL                                                                                                                                                                                                                                            |
| <b>Sensitivity</b>                  | 3.9 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>                | Cancer                                                                                                                                                                                                                                                           |
| <b>Gene Names</b>                   | Pdgfra                                                                                                                                                                                                                                                           |
| <b>Tag Info</b>                     | quantitative                                                                                                                                                                                                                                                     |
| <b>Protein Description</b>          | Sandwich                                                                                                                                                                                                                                                         |
| <b>Description</b>                  | This Mouse PDGFRA ELISA Kit was designed for the quantitative measurement of Mouse PDGFRA protein in serum, plasma, tissue homogenates, cell lysates. It is a Sandwich ELISA kit, its detection range is 15.6 pg/mL-1000 pg/mL and the sensitivity is 3.9 pg/mL. |



## Target Details

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. Studies in knockout mice, where homozygosity is lethal, indicate that the alpha form of the platelet-derived growth factor receptor is particularly important for kidney development since mice heterozygous for the receptor exhibit defective kidney phenotypes.

## 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 mouse PDGFR- $\alpha$  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 % | 89         |
|     | Range %   | 86-93      |
| 1:2 | Average % | 97         |
|     | Range %   | 92-101     |
| 1:4 | Average % | 91         |
|     | Range %   | 88-97      |
| 1:8 | Average % | 92         |
|     | Range %   | 84-96      |

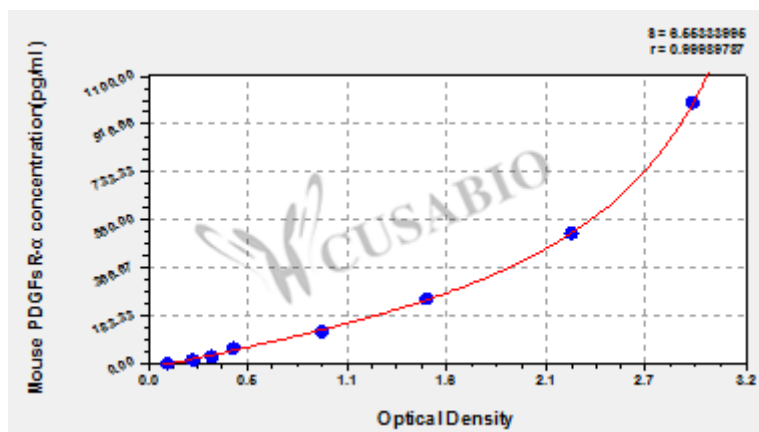
## Recovery

The recovery of mouse PDGFR- $\alpha$  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)       | 93                 | 88-98  |
| EDTA plasma (n=4) | 99                 | 96-105 |

## 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 |       |
|-------|-------|-------|-------------------|-------|
| 1000  | 2.795 | 3.012 | 2.904             | 2.787 |
| 500   | 2.214 | 2.304 | 2.259             | 2.142 |
| 250   | 1.436 | 1.550 | 1.493             | 1.376 |
| 125   | 0.899 | 0.974 | 0.937             | 0.820 |
| 62.5  | 0.472 | 0.461 | 0.467             | 0.350 |
| 31.25 | 0.351 | 0.342 | 0.347             | 0.230 |
| 15.6  | 0.244 | 0.253 | 0.249             | 0.132 |
| 0     | 0.113 | 0.120 | 0.117             |       |

## Msds

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