



# Mouse Vascular endothelial cell growth factor receptor 2, VEGFR-2/Flk-1 ELISA kit

|                                     |                                                                                                                                                                                                                                             |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Code</b>                 | CSB-E04764m                                                                                                                                                                                                                                 |
| <b>Abbreviation</b>                 | VEGFR-2/Flk-1                                                                                                                                                                                                                               |
| <b>Protein Biological Process 1</b> | Angiogenesis                                                                                                                                                                                                                                |
| <b>Target Name</b>                  | kinase insert domain receptor (a type III receptor tyrosine kinase)                                                                                                                                                                         |
| <b>Uniprot No.</b>                  | P35918                                                                                                                                                                                                                                      |
| <b>Alias</b>                        | CD309, FLK1, VEGFR, VEGFR2, fetal liver kinase-1 kinase insert domain receptor protein-tyrosine kinase receptor Flk-1 soluble VEGFR2 tyrosine kinase growth factor receptor vascular endothelial growth                                     |
| <b>Product Type</b>                 | ELISA Kit                                                                                                                                                                                                                                   |
| <b>Immunogen Species</b>            | Mus musculus (Mouse)                                                                                                                                                                                                                        |
| <b>Protein Biological Process 3</b> | Angiogenesis                                                                                                                                                                                                                                |
| <b>Sample Types</b>                 | serum, plasma                                                                                                                                                                                                                               |
| <b>Detection Range</b>              | 7.8 pg/mL-500 pg/mL                                                                                                                                                                                                                         |
| <b>Sensitivity</b>                  | 1.95 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>                   | Kdr                                                                                                                                                                                                                                         |
| <b>Tag Info</b>                     | quantitative                                                                                                                                                                                                                                |
| <b>Protein Description</b>          | Sandwich                                                                                                                                                                                                                                    |
| <b>Description</b>                  | This Mouse VEGFR-2/Flk-1 ELISA Kit was designed for the quantitative measurement of Mouse VEGFR-2/Flk-1 protein in serum, plasma. It is a Sandwich ELISA kit, its detection range is 7.8 pg/mL-500 pg/mL and the sensitivity is 1.95 pg/mL. |
| <b>Target Details</b>               | Vascular endothelial growth factor (VEGF) is a major growth factor for endothelial cells. This gene encodes one of the two receptors of the VEGF. This receptor, known as kinase insert domain receptor, is a type III receptor tyrosine    |



kinase. It functions as the main mediator of VEGF-induced endothelial proliferation, survival, migration, tubular morphogenesis and sprouting. The signalling and trafficking of this receptor are regulated by multiple factors, including Rab GTPase, P2Y purine nucleotide receptor, integrin  $\alpha$ V $\beta$ 3, T-cell protein tyrosine phosphatase, etc.. Mutations of this gene are implicated in infantile capillary hemangiomas.

## 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 VEGFR-2/Flk-1 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) |
|-------|-----------|------------|
| 1:100 | Average % | 86         |
|       | Range %   | 82-91      |
| 1:200 | Average % | 101        |
|       | Range %   | 98-105     |
| 1:400 | Average % | 87         |
|       | Range %   | 84-91      |
| 1:800 | Average % | 100        |
|       | Range %   | 95-105     |

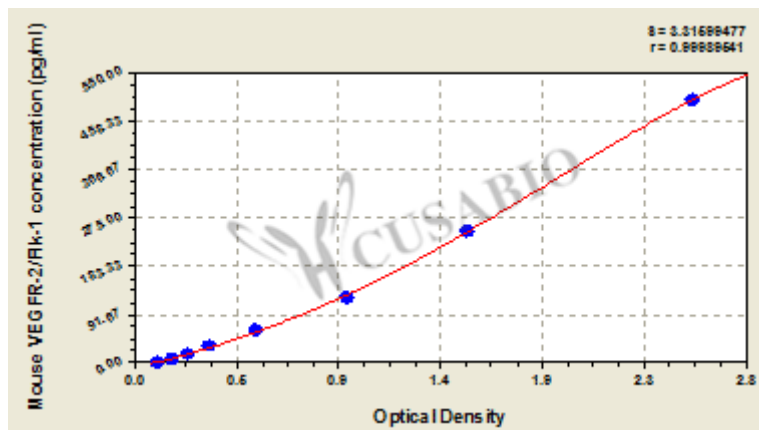
## Recovery

The recovery of mouse VEGFR-2/Flk-1 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)       | 89                 | 85-94   |
| EDTA plasma (n=4) | 107                | 103-110 |

## 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 |
|-------|-------|-------|---------|-----------|
| 500   | 2.564 | 2.536 | 2.550   | 2.438     |
| 250   | 1.513 | 1.531 | 1.522   | 1.410     |
| 125   | 0.985 | 0.961 | 0.973   | 0.861     |
| 62.5  | 0.551 | 0.560 | 0.556   | 0.444     |
| 31.2  | 0.345 | 0.351 | 0.348   | 0.236     |
| 15.6  | 0.242 | 0.251 | 0.247   | 0.135     |
| 7.8   | 0.174 | 0.176 | 0.175   | 0.063     |
| 0     | 0.113 | 0.110 | 0.112   | ?         |

## Msds

```
{
  "0": {
    "fileurl": "https://www.cusabio.com/uploadfile/msds/MSDS CSB-E04764m.pdf",
    "filename": "MSDS"
  }
}
```