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

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|---|---|
| **Product Code** | CSB-E07348r |
| **Abbreviation** | VEGFR-2/Flk-1 |
| **Protein Biological Process 1** | Angiogenesis |
| **Target Name** | kinase insert domain receptor (a type III receptor tyrosine kinase) |
| **Uniprot No.** | O08775 |
| **Alias** | 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 growt |
| **Product Type** | ELISA Kit |
| **Immunogen Species** | Rattus norvegicus (Rat) |
| **Protein Biological Process 3** | Angiogenesis |
| **Sample Types** | serum, plasma, tissue homogenates |
| **Detection Range** | 1.56 ng/mL-100 ng/mL |
| **Sensitivity** | 0.39 ng/mL |
| **Assay Time** | 1-5h |
| **Sample Volume** | 50-100ul |
| **Detection Wavelength** | 450 nm |
| **Lead Time** | 3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx. |
| **Research Area** | Cancer |
| **Gene Names** | Kdr |
| **Tag Info** | quantitative |
| **Protein Description** | Sandwich |
| **Description** | This Rat VEGFR-2/Flk-1 ELISA Kit was designed for the quantitative measurement of Rat VEGFR-2/Flk-1 protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 1.56 ng/mL-100 ng/mL and the sensitivity is 0.39 ng/mL. |
| **Target Details** | 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 alphaVbeta3, 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 rat 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) |
|---|---|---|
| 1:1 | Average % | 103 |
| | Range % | 98-107 |
| 1:2 | Average % | 96 |
| | Range % | 91-100 |
| 1:4 | Average % | 90 |
| | Range % | 83-97 |
| 1:8 | Average % | 99 |
| | Range % | 93-105 |

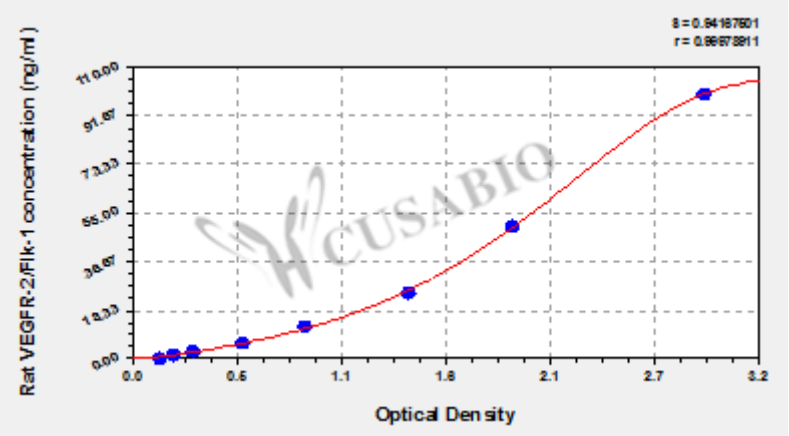
**Recovery**

The recovery of rat 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) | 107 | 101-113 |
| EDTA plasma (n=4) | 94 | 90-99 |

**Typical**

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




| ng/ml | OD1 | OD2 | Average | Corrected |
|---|---|---|---|---|
| 100 | 2.954 | 2.911 | 2.933 | 2.783 |
| 50 | 1.933 | 1.973 | 1.953 | 1.803 |
| 25 | 1.365 | 1.480 | 1.423 | 1.273 |
| 12.5 | 0.894 | 0.885 | 0.890 | 0.740 |
| 6.25 | 0.558 | 0.599 | 0.579 | 0.429 |
| 3.12 | 0.313 | 0.328 | 0.321 | 0.171 |
| 1.56 | 0.222 | 0.230 | 0.226 | 0.076 |
| 0 | 0.145 | 0.154 | 0.150 | |

**Msds**

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