

## **Product datasheet for AM33395PU-N**

### OriGene Technologies, Inc.

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# **VEGF Receptor 2 (KDR) Rat Monoclonal Antibody [Clone ID: 3C8]**

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: 3C8

**Applications:** FC, IF, WB

Recommended Dilution: Western Blot: 2-5 µg/ml.

Immunofluorescence: 2-10 µg/ml.

**FACS:** 1-5 μg/ml.

Reactivity: Mouse

**Host:** Rat

Isotype: lgG1

Clonality: Monoclonal

Immunogen: Purified, Insect Cell-derived recombinant Mouse soluble FLK1/KDR (110kDa).

**Specificity:** This antibody will detect native Human VEGFR-2/KDR on the surface of different Human cell

types.

**Formulation:** PBS pH 7.4 without preservatives

State: Purified

State: Lyophilized purified IgG fraction

Stabilizer: None

**Reconstitution Method:** Restore in sterile water to a concentration of 0.1-1.0 mg/ml

**Purification:** Protein G Chromatography

Conjugation: Unconjugated

Storage: Store lyophilized at 2-8°C for 6 months or at -20°C long term.

After reconstitution store the antibody undiluted at 2-8°C for one month

or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**Gene Name:** kinase insert domain receptor

Database Link: P35968





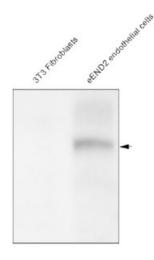
#### Background:

VEGF R2 (mouse Flk1 gene), VEGF R1 (Flt1) and VEGF R3 (Flt4) belong to the class III subfamily of receptor tyrosine kinases (RTKs). All three receptors contain seven immunoglobulinlike repeats in their extracellular domains and kinase insert domains in their intracellular regions. The expression of VEGF R1, 2, and 3 is almost exclusively restricted to the endothelial cells. These receptors are likely to play essential roles in vasculogenesis and angiogenesis. Mouse VEGF R2 cDNA encodes a 1367 amino acid (aa) precursor protein with a 19 aa signal peptide. Mature VEGF R2 is composed of a 743 aa extracellular domain, a 22 aa transmembrane domain, and a 583 aa cytoplasmic domain. In contrast to VEGF R1 which binds both PIGF and VEGF with high affinity, VEGF R2 binds VEGF but not PIGF with high affinity. The solube receptor was used as a an antigen.

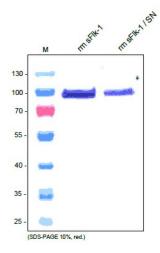
Synonyms:

VEGFR2, FLK1, KDR, VEGF Receptor 2

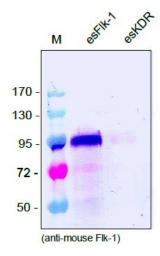
### **Product images:**



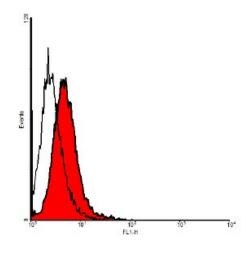
Western analysis with VEGFR-2/Flk-1 expressing eEND2 endothelial cells.



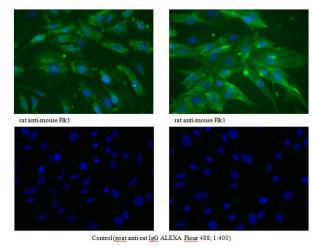
Western analysis of recombinant VEGFR-2/Flk-1 derived from insect cells and supernatant of VEGFR-2/Flk-1 expressing insect cells.



Western analysis of recombinant mouse VEGFR-2/Flk-1 and human VEGFR-2/KDR both derived from insect cells.



FACS analysis with primary mouse endothelial cells (SnoMec).



Immunofluorescence staining of VEGFR-2/Flk-1 in mouse primary endothelial cells (SnoMec) with monoclonal rat anti-mouse VEGFR-2/Flk-1 (Clone 3C8) (upper panel). Control with goat anti-rat ALEXA Flour 488 (lower panel).