

Product datasheet for DM3504B

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

VEGF Receptor 1 (FLT1) Mouse Monoclonal Antibody [Clone ID: #EWC]

Product data:

Product Type: Primary Antibodies

Clone Name: #EWC

Applications: ELISA, IF, WB

Recommended Dilution: ELISA: 1.5–8 μg/ml lgG1.

Western Blot: 1–10 μg/ml lgG1.

Reactivity: Human, Mouse

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Recombinant Human soluble extracellular Flt-1 (D5) (Cat.-No DA3539X)

Specificity: The unconjugated monoclonal antibody will detect native and denatured Human VEGFR-1/Flt-

1 in ELISA experiments and on the surface of different Human cell types.

The antibody will also detect Mouse Flt-1 (e.g. natural occurring soluble Mouse Flt-1).

This clone was formerly named FLTEWC.

Formulation: PBS

Label: Biotin

State: Lyophilized purified IgG fraction

Stabilizer: 50x BSA

Preservative: 0.02% Sodium Azide

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

Purification: Protein G Chromatography

Conjugation: Biotin

Storage: Prior to reconstitution store at 2-8°C for one month or at -20°C for 6 month.

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

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

Stability: Shelf life: one year from despatch.



VEGF Receptor 1 (FLT1) Mouse Monoclonal Antibody [Clone ID: #EWC] - DM3504B

Gene Name: fms related tyrosine kinase 1

Database Link: Entrez Gene 2321 Human

P17948

Background: Recombinant human soluble Vascular Endothelial Growth Factor Receptor-1 (sVEGFR-1) is the

naturally occurring form and was cloned from total RNA of human umbilical vein endothelial

cells.

The mature rh-sVEGFR-1 is a glycosylated monomeric protein with a mass of approximately 96kDa. The soluble receptor consists of the first 6 extracellular domains containing the unique 31 amino acids residues at the C-terminus. Endothelial cells express three different vascular VEGF receptors, belonging to the family of receptor tyrosine kinases (RTKs). They are named VEGFR-1 (Flt-1), VEGFR-2 (KDR/Flk-1), and VEGFR-3 (Flt-4). Their expression is almost exclusively restricted to endothelial cells, but VEGFR-1 can also be found on monocytes, dendritic cells and on trophoblast cells.

The flt-1 gene was first described in 1990. The receptor contains seven immunoglobulin-like extracellular domains, a single transmembrane region and an intracellular split tyrosine kinase domain. VEGFR-1 thus leads not to proliferation of endothelial cells, but mediates signals for differentiation. Interestingly, a naturally occurring soluble variant of VEGFR-1 (sVEGFR-1) was found in HUVEC supernatants in 1996, which is generated by alternative splicing of the flt-1 mRNA.

The biological functions of sVEGFR-1 still are not clear, but it seems to be an endogenous regulator of angiogenesis binding VEGF with the same affinity as the full-length receptor.

Synonyms: VEGFR1, FLT1, FLT, FRT, VEGF Receptor 1