

## Product datasheet for **AR31149PU-N**

### VEGFR-1 / Flt-1 (D1-7) (Fc Chimera) Mouse Protein

#### Product data:

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	VEGFR-1 / Flt-1 (D1-7) (Fc Chimera) mouse recombinant protein, 50 µg
<b>Species:</b>	Mouse
<b>Expression Host:</b>	Insect
<b>Expression cDNA Clone or AA Sequence:</b>	YGS GSKLKVP ELSLKG TQHV MQAGQTLFLK CRGEAAHSWS LPTTVSQEDK RLSITPPSAC GRDNRQFCST LTLDTAQANH TGLYTCRYLP TSTSKKKKAE SSIYIFVSDA GSPFIEMHTD IPKLVHMTEG RQLIIPCRVT SPNVTVTLKK FPFDTLTPDG QRITWDSRRG FIANATYKE IGLLNCEATV NGHLYQTNYL THRQNTILD VQIRPPSPVR LLHGQTLVLN CTATTELNTR VQMSWNYPGK ATKRASIRQR IDRSHSHNNV FHSV LKINNV ESRDKGLYTC RVKSGSSFQS FNTSVHVYEK GFISVKHRKQ PVQETTAGRR SYRLSMKVKA FPSPEIVWLK DGSPATLKSA RYL VHGYSLI IKDVTTEDAG DYTILLGIKQ SRLFKNLTAT LIVNVKPIY EKS VSSLPSP PLYPLGSRQV LTCTVYGIPR PTITWLWHPCHHNH SKERYD FCTENEESFI LDPSSNLG NR IESISQRMTV IEGTNKTVST LVVADSQTPG IYSCRAFNKI GTVERNIKFY VTDVPNGFHV SLEKMPAEGE DLKLS CVVNK FLYRDITWIL LRTVNNRTMH HSISKQKMAT TQDYSITLNL VIKNVSLEDS GTYACRARNI YTGEDILRKT EVLVRDSEAP HLLQNLSDYE VSISGSTTLD CQARGVPAPQ ITWFKNNHKI QQEPGIILGP GNSTLFIERV TEEDEGVYRC RATNQKGAVE SAAYLTVQGT SDKSNAASDK THTCPPCAP ELLGGPSVFL FPPKPKDTLM ISRTPEVTCV VVDVSHEDPE VKFNWYVDGV EVHNAKTKPR EEQYNSTYRV VSLTVLHQD WLNGKEYKCK VSNKALPAPI EKTISKAKGQ PREPQVYTL PPSREEMTKNQ VSLTCLVKGF YPSDIAVEWE SNGQPENNYK TTPPMLDSDG SFFLYSKLTV DKSRWQQGNV FSCSVMHEAL HNHYTQKSL S LSPGK
<b>Predicted MW:</b>	130 kDa
<b>Purity:</b>	>95% by SDS-PAGE and visualised by silver stain
<b>Buffer:</b>	Presentation State: Purified State: Lyophilized purified protein Buffer System: PBS, pH 7.4 without stabilizers
<b>Bioactivity:</b>	Biological: The activity of sVEGFR-1/Fc was determined by its ability to inhibit the VEGF-dependent proliferation of human umbilical vein endothelial cells. The ED50 for this effect is typically 10-30 ng/ml.
<b>Reconstitution Method:</b>	Restore in water or medium to a concentration not lower than 50 µg/ml. The lyophilised sVEGFR-1/Fc is soluble in water and most aqueous buffers.
<b>Preparation:</b>	Lyophilized purified protein



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<b>Protein Description:</b>	Recombinant Mouse soluble Vascular Endothelial Growth Factor Receptor-1 (sVEGFR-1(D7)) was fused with the Fc part of human IgG1. The recombinant mature sVEGFR-1(D7)/Fc is a disulfide-linked homodimeric protein. The sVEGFR-1(D7)/Fc monomers have a mass of approximately 130 kDa. The soluble receptor protein consists of all 7 extracellular domains (Tyr23-Asn757), which contain all the information necessary for high affinity ligand binding. <b>Result by N-terminal sequencing:</b> SGSKLLKD
<b>Storage:</b>	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.
<b>Stability:</b>	Shelf life: one year from despatch.
<b>RefSeq:</b>	<a href="#">NP_034358</a>
<b>Locus ID:</b>	14254
<b>UniProt ID:</b>	<a href="#">P35969</a>
<b>Cytogenetics:</b>	5 87.01 cM
<b>Synonyms:</b>	VEGFR1, FLT1, FLT, FRT, VEGF Receptor 1
<b>Summary:</b>	Tyrosine-protein kinase that acts as a cell-surface receptor for VEGFA, VEGFB and PGF, and plays an essential role in the development of embryonic vasculature, the regulation of angiogenesis, cell survival, cell migration, macrophage function, chemotaxis, and cancer cell invasion. May play an essential role as a negative regulator of embryonic angiogenesis by inhibiting excessive proliferation of endothelial cells. Can promote endothelial cell proliferation, survival and angiogenesis in adulthood. Its function in promoting cell proliferation seems to be cell-type specific. Promotes PGF-mediated proliferation of endothelial cells, and proliferation of some types of cancer cells, but does not promote proliferation of normal fibroblasts. Has very high affinity for VEGFA and relatively low protein kinase activity; may function as a negative regulator of VEGFA signaling by limiting the amount of free VEGFA and preventing its binding to KDR. Modulates KDR signaling by forming heterodimers with KDR. Ligand binding leads to the activation of several signaling cascades. Activation of PLCG leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate and the activation of protein kinase C. Mediates phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase, leading to the activation of phosphatidylinositol kinase and the downstream signaling pathway. Mediates activation of MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling pathway, as well as of the AKT1 signaling pathway. Phosphorylates SRC, YES1 and PLCG, and may also phosphorylate CBL. Promotes phosphorylation of AKT1 and PTK2/FAK1 (By similarity).[UniProtKB/Swiss-Prot Function]

## Product images:

