11 Park Drive, Suite 12
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Human soluble VEGFR-1 (D3) recombinant protein

ORDERING INFORMATION

Catalog No: rAP-0276
Size: 2 µg; 10µg
Storage: <- 20° C

Synonyms:
FLT-1, FLT1, Tyrosine-protein kinase receptor FLT, Flt-1, Tyrosine-protein kinase FRT, Fms-like tyrosine kinase 1, VEGFR-1.

Introduction:
Endothelial cells express three different vascular endothelial growth factor (VEGF) receptors, belonging to the family of receptor tyrosine kinases (RTKs). They are named VEGFR-1 (Flt-1), VEGFR-2 (KDR/Flk-1), 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 splited tyrosine kinase domain. Compared to VEGFR-2 the Flt-1 receptor has a higher affinity for VEGF but a weaker signaling activity. VEGFR-1 thus leads not to proliferation of endothelial cells, but mediates signals for differentiation. Interestingly a naturally occuring soluble variant of VEGFR-1 (sVEGFR-1) was found in HUVE 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.

Description:
VEGFR-1 D1-3 Human Recombinant produced in E.Coli is monomeric, glycosylated, polypeptide containing 298 amino acids fragment (31-328) and having a molecular mass of 43 kDa. The receptor protein contains only the first 3 extracellular domains, which contain all the information necessary for binding of VEGF.
The VEGFR1 is purified by proprietary chromatographic techniques.

Source:
Insect Cells

Physical Appearance:
Sterile Filtered clear solution.

Formulation:
VEGFR1-His is supplied in 1x PBS and 50% glycerol.

Stability:
Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time.
Please avoid freeze thaw cycles.

Purity:
Greater than 95.0% as determined by:
(a)Analysis by RP-HPLC.
(b)Analysis by SDS-PAGE

Usage: Angio-Proteomie's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

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