32-3019: FLT1 His Recombinant Protein

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

Description

Source : Escherichia Coli. FLT1 Human Recombinant produced in E.Coli is single, a non-glycosylated, Polypeptide chain containing 298 amino acids fragment (31-328) corresponding to the IgG like domains 1-3 from the mature soluble FLT1 protein, having a total molecular mass of 43kDa and fused with a 4.5kDa amino-terminal hexahistidine tag. The FLT1 His is purified by proprietary chromatographic techniques. 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.

Product Info

Amount :	10 µg
Purification :	Greater than 95.0% as determined by SDS-PAGE.
Content :	FLT1 His-Tag protein is supplied in 1x PBS and 50% glycerol.
Storage condition :	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.

For Research Use Only. Not for use in diagnostic/therapeutics procedures.