

32-3014: FLT1 D3 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 : Insect Cells. FLT1 D1-3 Human Recombinant produced in baculovirus is monomeric, glycosylated, polypeptide containing 298 amino acids fragment (31-328) and having a molecular mass of 38.16kDa. The receptor protein contains only the first 3 extracellular domains, which contain all the information necessary for binding of VEGF. The FLT1 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 split 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 occurring 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:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
Content : FLT1 His (0.96mg/ml) is supplied in 25mM Na-Acetate pH 4.8 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.

