

Recombinant Human VEGFR1 Catalog No: CJ93

Description Recombinant Human Vascular Endothelial Growth Factor Receptor 1 is produced by our Mammalian

expression system and the target gene encoding Ser27-Asn756 is expressed with a Fc tag at the C-

terminus.

Source Human Cells

Alternative name Vascular endothelial growth factor receptor 1; VEGFR-1;Fms-like tyrosine kinase 1;FLT-1;Tyrosine-

protein kinase FRT; Tyrosine-protein kinase receptor FLT; Vascular permeability factor receptor

Accession No. P17948

Formulation Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

Reconstitution Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

It is not recommended to reconstitute to a concentration less than 100µg/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Quality Control Purity: Greater than 95% as determined by reducing SDS-PAGE.

Endotoxin: Less than 0.1 ng/μg (1 IEU/μg) as determined by LAL test.

Shipping The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

Storage Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

SKLKDPELSLKGTQHIMQAGQTLHLQCRGEAAHKWSLPEMVSKESERLSITKSACGRNGKQFCSTLTL NTAQANHTGFYSCKYLAVPTSKKKETESAIYIFISDTGRPFVEMYSEIPEIIHMTEGRELVIPCRVTSPNIT

Amino Acid Sequence VTLKKFPLDTLIPDGKRIIWDSRKGFIISNATYKEIGLLTCEATVNGHLYKTNYLTHRQTNTIIDVQISTPRP VKLLRGHTLVLNCTATTPLNTRVQMTWSYPDEKNKRASVRRRIDQSNSHANIFYSVLTIDKMQNKDKGL YTCRVRSGPSFKSVNTSVHIYDKAFITVKHRKQQVLETVAGKRSYRLSMKVKAFPSPEVVWLKDGLPAT EKSARYLTRGYSLIIKDVTEEDAGNYTILLSIKQSNVFKNLTATLIVNVKPQIYEKAVSSFPDPALYPLGSR QILTCTAYGIPQPTIKWFWHPCNHNHSEARCDFCSNNEESFILDADSNMGNRIESITQRMAIIEGKNKMA STLVVADSRISGIYICIASNKVGTVGRNISFYITDVPNGFHVNLEKMPTEGEDLKLSCTVNKFLYRDVTWIL LRTVNNRTMHYSISKQKMAITKEHSITLNLTIMNVSLQDSGTYACRARNVYTGEEILQKKEITIRDQEAPY LLRNLSDHTVAISSSTTLDCHANGVPEPQITWFKNNHKIQQEPGIILGPGSSTLFIERVTEEDEGVYHCKA TNQKGSVESSAYLTVQGTSDKSNVDDIEGRMDEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTL MISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKE YKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQP ENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Human Vascular endothelial growth factor receptor 1(VEGFR-1, FLT-1) is a member of the the class III subfamily of receptor tyrosine kinases (RTKs) and Tyr protein kinase family and CSF-1/PDGF receptor subfamily. VEGFR-1 is widely expressed in human tissues including normal lung, placenta, liver, kidney, heart and brain tissues. It is specifically expressed in most of the vascular endothelial cellsand peripheral blood monocytes. VEGFR-1 contains seven Ig-like C2-type domains and one protein kinase domain. VEGFR-1is an essential receptor tyrosine kinase and plays an important role in theregulation of VEGF family-mediated vasculogenesis, angiogenesis, and lymphangiogenesis. It is also mediators of neurotrophic activity and regulators of hematopoietic development. VEGFR-1 is a receptor for VEGF, VEGFB and PGF. It has a tyrosine-protein kinase activity. Tyrosine-protein kinase that acts as a cell-surface receptor for VEGFA, VEGFB and PGF. It may play an essential role as a negative regulator of embryonic angiogenesis by inhibiting excessive proliferation of endothelial cells and promote endothelial cell proliferation, survival and angiogenesis in adulthood. Its function in promoting cell proliferation seems to be cell-type specific. VEGFR-1 can also promote PGF-mediated proliferation of endothelial

Background





cells, proliferation of some types of cancer cells, but does not promote proliferation of normal fibroblasts (in vitro).

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