## Recombinant Human VEGF165 (rHu VEGF165)

Catalog No: #70505



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| Description        |  |
|--------------------|--|
| Product Name       | Recombinant Human VEGF165 (rHu VEGF165)  |
| Brief Description  | Recombinant Protein  |
| Host Species       | E.coli   |
| Purification       | > 95 % by SDS-PAGE and HPLC analyses.  |
| Species Reactivity | Hu   |
| Target Name        | rHu VEGF165  |
| Other Names        | Vascular Endothelial Growth Factor Isoform 165   |
| Accession No.      | accession:P15692 GeneID:7422   |
| Uniprot            | P15692   |
| GeneID             | 7422;  |
| Calculated MW      | Approximately 38.6 kDa, a disu   |
| SDS-PAGE MW        | Sterile Filtered White lyophil   |
| Target Sequence    | MAPMAEGGGQ NHHEVVKFMD VYQRSYCHPI ETLVDIFQEY PDEIEYIFKP SCVPLMRCGG CCNDEGLECV                                     |
|                    | PTEESNITMQ IMRIKPHQGQ HIGEMSFLQH NKCECRPKKD RARQENPCGP CSERRKHLFV  |
|                    | QDPQTCKCSC KNTDSRCKAR QLELNERTCR CDKPRR  |
| Formulation        | Lyophilized from a 0.2 $\mu$ m filtered concentrated solution in PBS, pH 7.4.                                    |
| Storage            | This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably |
|                    | desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability,  |
|                    | apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated      |
|                    | freeze thaw cycles.  |

## Background

Vascular Endothelial Growth Factor is a sub-family of growth factors produced by cells, which stimulates vasculogenesis and angiogenesis. VEGF's normal function is to create new blood vessels during embryonic development, new blood vessels after injury, muscle following exercise, and new vessels (collateral circulation) to bypass blocked vessels. Humans express alternately spliced isoforms of 121, 145, 165, 183, 189, and 206 amino acids (a.a.) in length. VEGF production can be induced in cells that are not receiving enough oxygen. VEGF165 appears to be the most abundant and potent isoform, followed by VEGF121 and VEGF189. Recombinant human VEGF165 contains 165 amino acids residues and it is a disulfide-linked homodimer. In addition, it shares 88 % a.a. with corresponding regions of mouse and rat, 96 % with porcine, 95 % with canine, and 93 % with feline, equine and bovine VEGF, respectively

## References

- 1. Leung DW, Cachianes G, Kuang WJ, et al. 1989. Science. 246:1306-9.
- 2. Byrne AM, Bouchier-Hayes DJ, Harmey JH. 2005. J Cell Mol Med. 9:777-94.
- 3. Robinson CJ, Stringer SE. 2001. J Cell Sci. 114:853-65.

Note: This product is for in vitro research use only