

## Recombinant Human VEGF 165, Tag Free

### Information

Gene ID	7422
Accession #	P15692
Alternate Names	Vascular Endothelial Growth Factor Isoform 165
Source	E.coli
Protein sequence	MAPMAEGGGQNHHEVVKFMDVYQRSYCHPIETLVDIFQEYYPDEIEYIFKPSCVPLMRCGG CCNDEGLECVPTTEESNITMQIMRIKPHQGQHIGEMSFLQHNKCECRPKKDRARQENPCGP CSERRKHLFVQDPQTCKCCKNTDSRCKARQLELNERTCRCDKPRR
Tag	Tag free
M.Wt	The protein has a calculated MW of 19.2 KDa.
Appearance	Solution protein
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles - 36 months from date of receipt, -20 to -70°C as supplied
Concentration	1 mg/mL
Formulation	Supplied as a 0.2 µm filtered solution in PBS, pH7.4.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. This solution can be diluted into other aqueous buffers.
Biological Activity	Testing in progress.
Shipping Condition	Shipping with dry ice.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

### Quality Control

Purity	> 95 % by SDS-PAGE.
Endotoxin	Less than 1.0 EU/µg as determined by LAL method.

### Description

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

Reference:

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.



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