

## Recombinant Canine VEGFA protein

**Cat. No.** VEGFA-453C    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant Canine VEGFA was expressed in Yeast. Canine VEGF-A was produced in yeast and therefore does not have endotoxin, is naturally folded, and post-translationally modified.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Species</b>          | Canine                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Source</b>           | Yeast                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>ProteinLength</b>    | 188 aa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Description</b>      | <p>Vascular endothelial growth factor (VEGF) proteins stimulate vasculogenesis and angiogenesis. They are part of the system that restores the oxygen supply to tissues when blood circulation is inadequate. The normal function of VEGF proteins 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. The VEGF family has six members, including VEGF-A, VEGF-B, VEGF-C, VEGF-D, VEGF-E, and Placental Growth Factor (PGF). Activity of VEGF-A, as its name implies, has been studied mostly on cells of the vascular endothelium, although it does have effects on a number of other cell types (e.g., stimulation monocyte/macrophage migration, neurons, cancer cells, kidney epithelial cells). In vitro, VEGF-A has been shown to stimulate endothelial cell mitogenesis and cell migration. VEGF-A is also a vasodilator and increases microvascular permeability and was originally referred to as vascular permeability factor (VPF).</p> |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                       |                                                                                                                                                                                                                                |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Molecular Mass</b> | Has a predicted molecular weight of 22.0 kDa.                                                                                                                                                                                  |
| <b>AA Sequence</b>    | APMAGGEHKP HEVVKFMDVY QRSYCRPIET LVDIFQEYPD EIEYIFKPSC<br>VPLMRCGGCC NDEGLECVPT EEFNITMQIM RIKPHQGQHI GEMSFLQHSK<br>CECRPKKDRA RQEKKSIRGK GKGQKRKRKK SRYKPWSVPC GPCSEERRKHL<br>FVQDPQTCKC SCKNTDSRCK ARQLELNERT CRCDKPRR (188) |
| <b>Applications</b>   | The Canine VEGF-A protein can be used in cell culture, as an VEGF-A ELISA Standard, and as a Western Blot Control.                                                                                                             |

## GENE INFORMATION

|                            |                                                                                         |
|----------------------------|-----------------------------------------------------------------------------------------|
| <b>Gene Name</b>           | VEGFA vascular endothelial growth factor A [ <i>Canis lupus familiaris</i> ]            |
| <b>Official Symbol</b>     | VEGFA                                                                                   |
| <b>Synonyms</b>            | VEGF; VEGF-A; VPF; vascular endothelial growth factor 188; vascular permeability factor |
| <b>Gene ID</b>             | 403802                                                                                  |
| <b>mRNA Refseq</b>         | NM_001003175                                                                            |
| <b>Protein Refseq</b>      | NP_001003175                                                                            |
| <b>MIM</b>                 |                                                                                         |
| <b>UniProt ID</b>          | Q9MYV3                                                                                  |
| <b>Chromosome Location</b> | chromosome: 12                                                                          |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                 |                                                                                                                                                                                                                 |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pathway</b>  | AGE-RAGE signaling pathway in diabetic complications, organism-specific biosystem;<br>Cytokine-cytokine receptor interaction, organism-specific biosystem; EPH-Ephrin<br>signaling, organism-specific biosystem |
| <b>Function</b> | chemoattractant activity; fibronectin binding; receptor agonist activity                                                                                                                                        |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA