

Rat VEGF-A (recombinant)



Alias: none **Catalog #:** 6510

Size: 5 ug **Research Use Only**

Molecular Weight: 20.6 kDa

Source: Yeast. Recombinant Rat VEGF-A was produced in yeast and, therefore, does not have endotoxin. It is naturally folded and post-translationally modified.

Formulation: Lyophilized without carrier protein.

Purity: >95% as visualized by SDS-PAGE analysis.

Purification: Ion-exchange chromatography.

Bioactivity: In testing

Entrez Gene ID: 83785

Number of Amino Acids: 188

Amino Acid Sequence: APTTEGEQKA HEVVKFMDVY QRSYCRPIET LVDIFQEYPD EIEYIFKPSC VPLMRCAGCC
NDEALECVPT SESNVTMQIM RIKPHQSQHI GEMSFLQHSR CECRPKKDRT KPEKKSVRGK
GKGQKRKRKK SRFKSWSVHC EPCSERRKHL FVQDPQTCKC SCKNTDSRCK ARQLELNERT
CRCDKPRR (188)

Country of Origin: USA

Reconstitution: Reconstitute with sterile phosphate-buffered saline containing at least 0.1% carrier protein.

Stability and Storage: Stable for up to twelve months from date of receipt at -20°C. Stable for at least 3 months when stored in working aliquots with a carrier protein at -20°C. Avoid repeated freeze/thaw cycles.

Applications:

Background: 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).

F17-6358-4-A Data Sheet; Effective: 1/10/14; Supersedes: None; Page 1 of 1; Recombinant Rat VEGF-A updated on: 1/29/2014