

## Product datasheet for **AR31053PU-N**

### VEGF-A (VEGF120) Rat Protein

#### Product data:

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	VEGF-A (VEGF120) rat recombinant protein, 5 µg
<b>Species:</b>	Rat
<b>Expression Host:</b>	E. coli
<b>Expression cDNA Clone or AA Sequence:</b>	APTTEGEQKA HEVVKFMDVY QRSYCRPIET LVDIFQEYPD EIEYIFKPSC VPLMRCAGCC NDEALECVPT SESNVTMQIM RIKPHQSQHI GEMSFLQHSR CECRPKKDRT KPEKCDKPRR Result by N-terminal sequencing: APTTEGEQKA H
<b>Predicted MW:</b>	14.02 kDa
<b>Purity:</b>	>95%
<b>Buffer:</b>	Presentation State: Purified State: Lyophilized freeze dried protein Buffer System: PBS without stabilizer
<b>Bioactivity:</b>	Biological: Determined by the dose-dependent stimulation of the proliferation of human umbilical vein endothelial cells (HUVEC) using a concentration range of 2-10 ng/ml.
<b>Endotoxin:</b>	< 0.1 ng/µg of Rat VEGF120
<b>Reconstitution Method:</b>	The lyophilized VEGF120 should be restored in ddH <sub>2</sub> O to a concentration not lower than 50 µg/ml.
<b>Preparation:</b>	Lyophilized freeze dried protein
<b>Protein Description:</b>	Recombinant Rat Vascular Endothelial Growth Factor 120
<b>Storage:</b>	Lyophilized samples are stable for greater than six months at -20°C to -70°C. Reconstituted VEGF120 should be stored in working aliquots at -20°C. Avoid repeated freeze-thaw cycles!
<b>RefSeq:</b>	<a href="#">NP_001103803</a>
<b>Locus ID:</b>	83785
<b>UniProt ID:</b>	<a href="#">B5DEK7</a>
<b>Cytogenetics:</b>	9q12
<b>Synonyms:</b>	Vegf; VEGF-A; VEGF111; VEGF164; VPF



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**Summary:**

This gene is a member of the PDGF/VEGF growth factor family. It encodes a heparin-binding protein, which exists as a disulfide-linked homodimer. This growth factor induces proliferation and migration of vascular endothelial cells, and is essential for both physiological and pathological angiogenesis. Disruption of this gene in mice resulted in abnormal embryonic blood vessel formation. This gene is upregulated in many known tumors and its expression is correlated with tumor stage and progression. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. There is also evidence for alternative translation initiation from upstream non-AUG (CUG) codons resulting in additional isoforms. A recent study showed that a C-terminally extended isoform is produced by use of an alternative in-frame translation termination codon via a stop codon readthrough mechanism, and that this isoform is antiangiogenic. Expression of some isoforms derived from the AUG start codon is regulated by a small upstream open reading frame, which is located within an internal ribosome entry site. [provided by RefSeq, Nov 2015]

**Product images:**