Revision 1

#5314 Store at -20C

Mouse Vascular Endothelial Growth Factor-120 ($mVEGF_{120}$)

Cell Signaling TECHNOLOGY®

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MW (kDa):	UniProt ID:	Entrez-Gene Id:
20-26	#Q00731	22339

Background

$VEGF_{120}$, a splice variant of the VEGF-A gene, is the murine counterpart to human $VEGF_{121}$ (1,2). $VEGF_{120}$ is produced by endothelial cells, macrophages, T cells, and others. $VEGF_{120}$ is involved in angiogenesis, vascular permeability, vascular endothelial cell survival, growth, and migration (1). $VEGF_{120}$ expression is induced by hypoxia, inflammatory cytokines, and through oncogene products in tumors (1,2). $VEGF_{120}$ binds to VEGFR1 and VEGFR2 receptor tyrosine kinases (1). Binding of $VEGF_{120}$ to VEGFR1 and VEGFR2 leads to activation of pathways involving PI3K/Akt, p38, and FAK (1). VEGF plays a key role in tumor angiogenesis in many cancers (2).

Endotoxin

Less than 0.01 ng endotoxin/1µg $mVEGF_{120}$.

Purity

>98% as determined by SDS-PAGE of 6 µg reduced (+) and non-reduced (-) recombinant $mVEGF_{120}$. All lots are greater than 98% pure.

Source / Purification

Recombinant mouse $VEGF_{120}$ ($mVEGF_{120}$) Ala27-Arg146 (Accession #NP_001020428) was expressed in human 293 cells at Cell Signaling Technology.

Bioactivity

The bioactivity of recombinant $mVEGF_{120}$ was determined in a cell proliferation assay using HUVEC. The ED_{50} of each lot is between 1-5 ng/ml.

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Background References

1. Takahashi, H. and Shibuya, M. (2005) *Clin Sci (Lond)* 109, 227-41.
2. Neufeld, G. et al. (1999) *FASEB J* 13, 9-22.

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse **GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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