Leinco Technologies, Inc.
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Human VEGF Antibody

Purified No Carrier Protein

Monoclonal Antibody

Product Information

Product No.:	V103
Clone:	26503
RRID:	AB_2832130
Isotype:	Mouse IgG2b
Storage:	-20° to -70°C

Product Description

Specificity:
Mouse Anti-Human Vascular Endothelial Growth Factor (VEGF) (Clone 26503) recognizes an epitope on Human VEGF. This monoclonal antibody was purified using multi-step affinity chromatography methods such as Protein A or G depending on the species and isotype.

Background:
Vascular endothelial growth factor (VEGF), a potent proangiogenic cytokine is the key signal used by oxygen-hungry cells to promote growth of blood vessels. It binds to specialized receptors on the surfaces of endothelial cells and directs them to build new vessels.1,2 VEGF are crucial regulators of vascular development during embryogenesis (vasculogenesis) and blood-vessel formation in the adult (angiogenesis). Abnormal VEGF function is associated with inflammatory diseases including atherosclerosis, and hyperthyroidism.3,4,5,6

Known Reactivity Species:
Human

Format:
Purified No Carrier Protein

Immunogen:
Purified Recombinant Human VEGF (>98%)

Formulation
This monoclonal antibody has been 0.2 µm filtered and lyophilized from modified Dulbecco's phosphate buffered saline (1X PBS) pH 7.2 - 7.4 containing 5.0% w/v trehalose with no calcium, magnesium or preservatives present.

Endotoxin
<0.1 EU/µg as determined by the LAL method

Storage and Stability
The lyophilized antibody can be stored desiccated at -20°C to -70°C for up to twelve months. The reconstituted antibody can be stored for at least four weeks at 2-8°C. For long-term storage of the reconstituted antibody, aseptically aliquot into working volumes and store at -20°C to -70°C in a manual defrost freezer. Avoid repeated freeze thaw cycles. No detectable loss of activity was observed after six months.

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Applications

Applications and Recommended Usage (Quality Tested By Leinco):

ELISA Sandwich: This antibody is useful as the capture antibody in a sandwich ELISA. The suggested coating concentration is 0.2-0.8 µg/ml. A suitable detection antibody is PN:V105 at a concentration of approximately 0.1-0.4 µg/ml. A suggested standard for this assay is PN:V101.

Western Blotting: To detect Human VEGF this monoclonal antibody can be used at a concentration of 0.1 -0.2 µg/ml. This monoclonal antibody should be used in conjunction with compatible second-step reagents such as PN:M114 and a chromogenic substrate such as PN:T343. The detection limit for Human VEGF is 25 ng/lane under either reducing or non-reducing conditions. The sensitivity of detection may increase up to 50 fold when a chemiluminescent substrate is used. A suitable Western blotting control is PN:V101.

Other Applications Reported in Literature:

IHC (NBF/Par.): This antibody should give satisfactory staining results when used at a concentration of 5-15 µg/ml. The recommended secondary antibody for IHC is PN:M114. For chromogenic detection with high signal and low background use PN:D100 or PN:K107.

Neutralization: This antibody is useful for neutralization of Human VEGF bioactivity. The antibody dose required to neutralize 50% (ND50) of the biological activity of Human VEGF (at 10 ng/ml) is 0.04 - 0.08 µg/ml.

Country of Origin

USA

References

1) Folkman, J. et al. (2008) FASEB J. 22: 3728
2) Goodsell, DS. et al. (2002) The Oncologist 7: 569
3) Mugishima, H. et al. (2006) J Atheroscler Thromb. 13: 130
4) Claesson-Welsh, L. et al. (2006) Exp Cell Res. 312: 549
5) Claesson-Welsh, L. et al. (1999) Trends Biochem Sci. 28: 488
6) Ellis, LM. et al. (2005) J Clin Oncol. 23: 1011

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