



# Anti-VEGF monoclonal antibody, clone OZSiWFHG (CABT-BL3761)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

Immunogen	r.HumanVEGF
Isotype	IgM
Source/Host	Mouse
Species Reactivity	Human
Clone	OZSiWFHG
Conjugate	Unconjugated
Applications	ELISA, WB, IP
Format	Lyophilized
Preservative	None
Storage	Reconstitute with sterile H <sub>2</sub> O. Mix gently, wash the sides of the vial and wait 30-60 seconds before use. Store lyophilized material at 4°C in a dry environment. After reconstitution, if not intended for use within a month, aliquot and store at -20°C. Mate

## BACKGROUND

Introduction	<p>Vascular endothelial growth factor A (VEGF-A) is a protein that in humans is encoded by the VEGFA gene.</p> <p>Vascular endothelial growth factor A (VEGF-A) is a dimeric glycoprotein that plays a significant role in neurons and is considered to be the main, dominant inducer to the growth of blood vessels. VEGFA is essential for adults during organ remodeling and diseases that involve blood</p>
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vessels, for example, in wound healing, tumor angiogenesis, diabetic retinopathy, and age-related macular degeneration. During early vertebrate development, vasculogenesis occurs which means that the endothelial condense into the blood vessels. The differentiation of endothelial cells is dependent upon the expression of VEGFA and if the expression is abolished then it can result in the death of the embryo. VEGFA is produced by a group of three major isoforms as a result of alternative splicing and if any three isoforms are produced (VEGFA120, VEGFA164, and VEGFA188) then this will not result in vessel defects and death of the full VEGFA knockout in mice. VEGFA is essential in the role of neurons because they too need vascular supply and abolishing the expression of VEGFA from neural progenitors will result in defects of the brain vascularization and neuronal apoptosis. Anti-VEGFA therapy can be used to treat patients with undesirable angiogenesis and vascular leakage in cancer and eye diseases but also could result in the inhibition of neurogenesis and neuroprotection. VEGFA could be used to treat patients with neurodegenerative and neuropathic conditions and also increase vascular permeability which will stop the blood-brain barrier and increase inflammatory cell infiltration.

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## GENE INFORMATION

Entrez Gene ID	<a href="#">7422</a>
Protein Refseq	<a href="#">NP_001020538</a>
UniProt ID	<a href="#">P15692</a>

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