

DESCRIPTION

Target:	VEGFA
Target aliases:	VPF, VEGF, MVCD1
Fc isotype:	IgG2a
Membrane proteome specificity:	Monospecific for 6,000 membrane proteins tested
Species reactivity:	Human (Others untested)
Extracellular epitope:	Yes
Fc modifications:	C-terminal Avitag ¹ , disabled Fc-γ receptor binding ²
Source:	Recombinant CHO expression; purified by Protein A chromatography
Formulation:	Endotoxin Free PBS pH 7.4, sterile-filtered
Concentration:	1 mg/ml

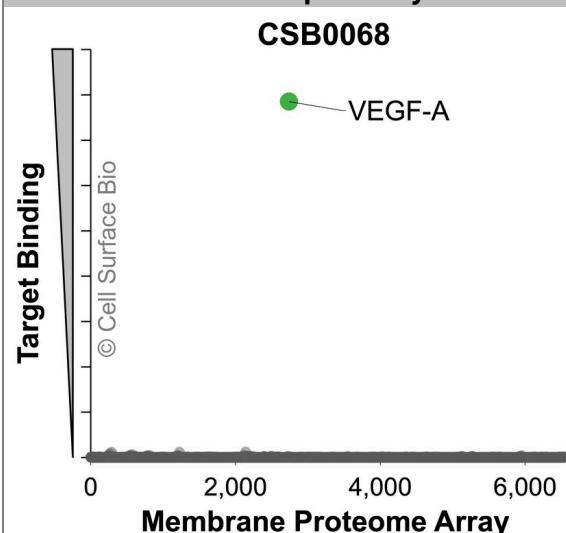
1. A peptide tag that can be biotinylated in vitro using the biotin ligase enzyme (BirA).
2. Mutated Fc-γ receptor binding site to minimize non-specific antibody binding.

VEGFA TARGET INFORMATION

VEGF-A is a member of the PDGF/VEGF growth factor family. Specifically, VEGF-A is a disulfide-linked homodimer that binds heparin. VEGF-A is a secreted protein involved in endothelial cell proliferation and migration, angiogenesis, and vasculogenesis. Increased expression is associated with SARS-CoV-2 and POEMS syndrome as well as many tumors, and allelic variants are associated with microvascular complications of diabetes 1 and atherosclerosis. (NCBI Gene: 7422, UniProtKB/Swiss-Prot: P15692) Other names: VPF, VEGF, MVCD1

SHIPPING AND STORAGE

Shipping:	Shipped at ambient temperature. Store at 4°C.
Stability & Storage:	Stable for 12 months from date of receipt when stored at 4°C. Avoid repeated freeze-thaw cycles.

VALIDATION DATA
Membrane Proteome Specificity


The specificity of VEGFA Monoclonal Antibody (CSB0068) was tested on the Membrane Proteome Array™ and shown to be specific for VEGFA.

The Membrane Proteome Array™ contains 6,000 different human membrane proteins, each expressed in unfixed human cells to ensure native conformation and post-translational modifications. The Membrane Proteome Array™ represents the industry standard for determining the binding specificity of antibodies and other protein ligands.

Applications	Conditions	Recommended concentration
Flow Cytometry, Extracellular	Live, Unpermeabilized	1 µg/ml

JS-1 cells transiently transfected with VEGFA were stained with VEGFA Monoclonal Antibody (CSB0068)(green) or isotype control antibody (gray), followed by AlexaFluor 647- conjugated anti- IgG secondary antibody. JS-1 cells transiently transfected with an empty control vector were also stained with VEGFA Monoclonal Antibody (CSB0068)(blue).

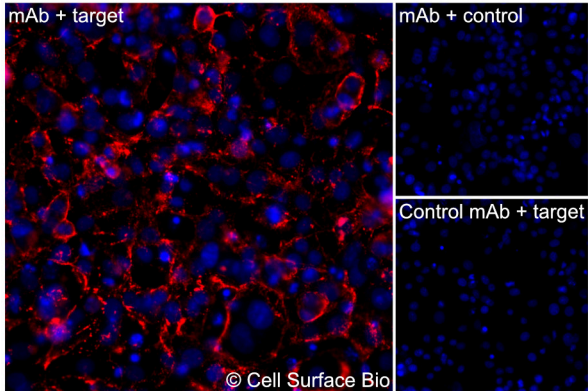
Applications	Conditions	Recommended concentration
Immunofluorescence, Extracellular	Fixed 4% paraformaldehyde	1 µg/ml

(Left) COS-7 cells transiently transfected VEGFA were stained with VEGFA Monoclonal Antibody (CSB0068) followed by AlexaFluor 647 anti- IgG secondary antibody (red) and DAPI (blue). (Top right) COS-7 cells transiently transfected with an empty control vector stained with VEGFA Monoclonal Antibody. (Bottom right) Isotype control: COS-7 cells transfected with VEGFA and stained with control MAb.

Applications
Immunofluorescence, Intracellular

Conditions
Fixed 4 % paraformaldehyde,
Permeabilized 0.1% Triton X-100

Recommended concentration
1 µg/ml



(Left) COS-7 cells transiently transfected VEGFA were permeabilized and stained with VEGFA Monoclonal Antibody (CSB0068) followed by AlexaFluor 647 anti- IgG secondary antibody (red) and DAPI (blue). (Top right) COS-7 cells transiently transfected with an empty control vector stained with VEGFA Monoclonal Antibody. (Bottom right) Isotype control: COS-7 cells transfected with {{target}} and stained with control MAb.