Technical Data Sheet

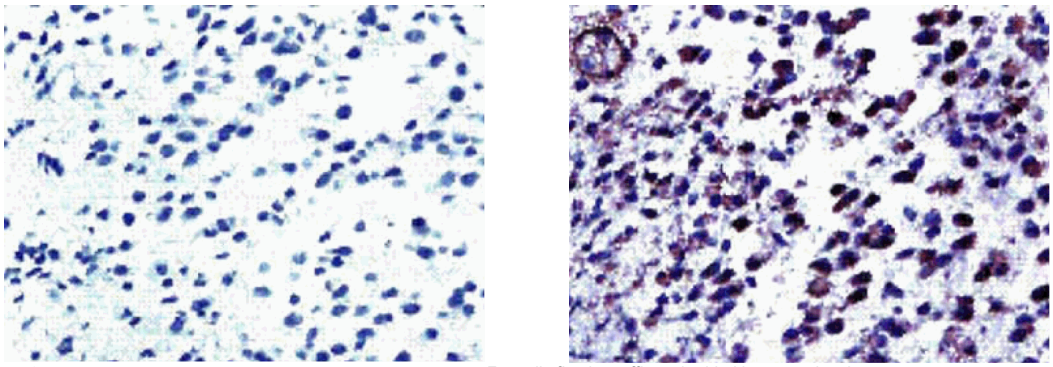
Purified Mouse Anti-Human VEGF

Product Information

Material Number:	**555036**
Size:	0.5 mg
Concentration:	0.5 mg/ml
Clone:	G153-694
Isotype:	Mouse IgG2b, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

Vascular endothelial growth factor (VEGF) is a heparin-binding, dimeric protein related to the PDGF/sis family of growth factors. Major sources of VEGF include pituitary cells, monocytes/macrophages, smooth muscle, and keratinocytes. VEGF is a mitogen for endothelial cells, activates and is chemoattractant for monocytes, enhances blood vessel permeability, and is a pro-coagulant. Human VEGF occurs in several molecular variants arising by alternative splicing of the mRNA. The splice forms of VEGF differ in biological properties. VEGF is a homodimeric heavily glycosylated protein of 46-48 kDa (18-25 kDa subunits). Glycosylation is not required, however, for biological activity. The subunits are linked by disulphide bonds. Different isoforms of VEGF have different properties in vitro and this may apply also to their in vivo functions.



VEGF Immonohistochemical staining on human colon tissue. *Formalin fixed paraffin embedded human colon tissue was pretreated with BD Retrievagen A (Cat. No. 550524) and then stained with either Purified Mouse IgG2b, κ Isotype Control (Cat. No. 557351; Left panel) or Purified Mouse Anti-Human VEGF (Cat. No. 555036; Right Panel).*

Preparation and Storage

Store undiluted at 4°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Application Notes

Application

Immunohistochemistry-formalin (antigen retrieval required)	Routinely Tested
Immunofluorescence	Tested During Development
Immunoprecipitation/Western blot	Reported

Recommended Assay Procedure:

IF/IHC: The G153-694 antibody is useful for immunohistochemical staining. Following Retrievagen A pretreatment, purified G153-694 antibody should be used at 2.5 µg/ml to 5 µg/ml and titrated for optimal indirect immunohistochemical staining. Tissues can be visualized via a three-step staining procedure in combination with Biotin Goat anti-Mouse Ig (Cat. No. 550337) secondary antibody and Streptravidin-HRP (Cat. No. 550946) together with the DAB Substrate Kit (Cat. No. 550880). More conveniently, the Anti-Mouse Ig HRP Detection Kit (Cat. No. 551011) that contains the biotinylated secondary antibody, antibody diluent, streptavidin-HRP and DAB substrate can be used for staining. Additional protocol information can be found at http://www.bdbiosciences.com/support/resources/cell_biology/index.jsp

IP/WB: The purified G153-694 antibody has been reported to be useful to immunoprecipitate native human VEGF and to identify VEGF by Western blotting. Please note that this application is not routinely tested at BD Biosciences Pharmingen. Investigators are advised to determine optimal concentrations for individual applications.

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Suggested Companion Products

Catalog Number	Name	Size	Clone
550337	Biotin Goat Anti-Mouse Ig (Multiple Adsorption)	1.0 ml	Polyclonal
557351	Purified Mouse IgG2b, κ Isotype Control	0.5 mg	MPC-11
550524	Retrievagen A (pH 6.0)	1000 ml	(none)
550946	Streptavidin HRP	50 ml	(none)
550880	DAB Substrate Kit	500 tests	(none)
551011	Anti-Mouse Ig HRP Detection Kit	200 tests	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

Andersson J, Abrams J, Bjork L, et al. Concomitant in vivo production of 19 different cytokines in human tonsils. *Immunology.* 1994; 83(1):16-24. (Biology)

Andersson U, Andersson J. Immunolabeling of cytokine-producing cells in tissues and in suspension. In: Fradelizie D, Emelie D, ed. *Cytokine Producing Cells.* Paris: Inserm; 1994:32-49. (Clone-specific: Immunohistochemistry)

Fernandez V, Andersson J, Andersson U, Troye-Blomberg M. Cytokine synthesis analyzed at the single-cell level before and after revaccination with tetanus toxoid. *Eur J Immunol.* 1994; 24(8):1808-1815. (Clone-specific: Immunohistochemistry)

Litton M, Andersson J, Bjork L, Fehniger T, Ulfgren AK, Andersson U. Cytoplasmic cytokine staining in individual cells. In: Debets and Savelkoul, ed. *Human Cytokine Protocols.* Humana Press; 1996. (Clone-specific: Immunohistochemistry)

Norrby-Teglund A, Norgren M, Holm SE, Andersson U, Andersson J. Similar cytokine induction profiles of a novel streptococcal exotoxin, MF, and pyrogenic exotoxins A and B. *Infect Immun.* 1994; 62(9):3731-3738. (Clone-specific: Immunohistochemistry)

Skansén-Saphir U, Andersson J, Björk L, Andersson U. Lymphokine production induced by streptococcal pyrogenic exotoxin-A is selectively down-regulated by pooled human IgG. *Eur J Immunol.* 1994; 24(4):916-922. (Clone-specific: Immunohistochemistry)