

Technical Data Sheet

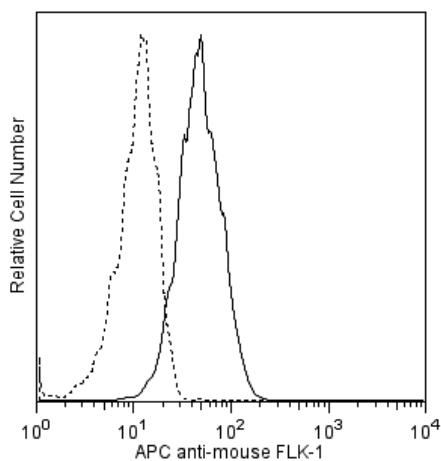
APC Rat anti-Mouse FLK-1

Product Information

Material Number:	561993
Alternate Name:	CD309; Fetal liver kinase 1; Kdr; VEGF Receptor-2; VEGFR-2; AVAS12;
Size:	25 µg
Concentration:	0.2 mg/ml
Clone:	Avas 12α1
Immunogen:	Mouse Flk-1 Recombinant Protein
Isotype:	Rat (WI) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The Avas 12α1 monoclonal antibody specifically binds to fetal liver kinase 1 (Flk-1) which is also known as CD309. Flk-1 is a receptor protein tyrosine kinase which is closely related to CD117 (c-kit) and CD140a (PDGF Receptor α chain) of the immunoglobulin superfamily. Flk-1, also known as VEGF Receptor-2 (VEGF-R2 or VEGFR2), is a receptor for vascular endothelial growth factor (VEGF). It is expressed, at the mRNA and protein levels, on distinct sets of mesoderm during gastrulation and on endothelial cells in embryonic and adult tissues. *In vivo* and *in vitro* studies indicate that Flk-1 is required for the embryonic development of vascular endothelial and hematopoietic cells.



Flow cytometric analysis of FLK-1 expression on bEnd.3 cells. bEnd.3 cells were stained either with APC Rat IgG2a, κ Isotype Control (Cat. No. 553932/554690; dashed line histogram) or with the APC Rat Anti-Mouse FLK-1 antibody (Cat. No. 561993/560070; solid line histogram). The flow cytometric histograms were derived from events with the forward and side light-scatter characteristics of viable bEnd.3 cells (ATCC CRL-2299). Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

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

The antibody was conjugated to APC under optimum conditions, and unconjugated antibody and free APC were removed.

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
553932	APC Rat IgG2a κ Isotype Control	0.1 mg	R35-95
554690	APC Rat IgG2a κ Isotype Control	0.1 mg	R35-95
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)
560070	APC Rat anti-Mouse FLK-1	0.1 mg	Avas 12α1

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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
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.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
5. This APC-conjugated reagent can be used in any flow cytometer equipped with a dye, HeNe, or red diode laser.
6. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

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