

VEGF Receptor 3 Monoclonal Antibody (AFL4), Functional Grade, eBioscience™

Product Details	
Size	500 µg
Species Reactivity	Mouse
Published Species	Mouse, Human
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Functional Grade, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	AFL4
Conjugate	Functional Grade
Form	Liquid
Concentration	1 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	no preservative
Storage conditions	4° C
RRID	AB_469192

Applications	Tested Dilution	Publications
Western Blot (WB)	-	5 Publications
Immunohistochemistry (IHC)	-	10 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	1 Publication
Flow Cytometry (Flow)	Assay-Dependent	2 Publications
Functional Assay (FN)	Assay-Dependent	-
Control (Ctrl)	Assay-Dependent	-
Miscellaneous PubMed (Misc)	-	2 Publications

Product Specific Information

Description: The AFL4 monoclonal antibody reacts with the mouse VEGF receptor-3, also known as Flt-4. This 195 kDa molecule was identified as an endothelial-specific member of the receptor tyrosine kinase (RTK) family. During early embryogenesis all endothelial cells express VEGFR-3, while in the adult tissues, VEGFR-3 expression disappears from the vascular endothelial cells and is observed only on the lymphatic endothelium. However, VEGFR-3 expression is induced in the adult tissue upon tumor implementation suggesting an important role for this receptor in the tumor angiogenesis. VEGF-C and VEGF-D bind to and activate VEGFR-3. AFL4 is an antagonist mAb.

Applications Reported: The AFL4 antibody has been reported for use in flow cytometric analysis.

Applications Tested: The AFL4 antibody has been tested by flow cytometric analysis of in vitro differentiated mouse endothelial cells. In brief, mouse ES cells were incubated on collagen IV matrix for 4 days and subsequently stimulated with VEGF under serum free conditions to induce further differentiation. It is recommended that the antibody be carefully titrated for optimal

performance in the assay of interest.

Storage and handling: Use in a sterile environment.

Filtration: 0.2 µm post-manufacturing filtered.

Purity: Greater than 90%, as determined by SDS-PAGE.

Endotoxin Level: Less than 0.001 ng/µg antibody, as determined by LAL assay.

Aggregation: Less than 10%, as determined by HPLC.

Western Blot (5)

Cell reports

G-Protein-Coupled Receptor-2-Interacting Protein-1 Controls Stalk Cell Fate by Inhibiting Delta-like 4-Notch1 Signaling.

"16-5988 was used in Western Blotting to show that GIT1 inhibits the Notch1-Dll4 signaling pathway by competing with Notch1 ANK domain for binding to RBP-J in stalk cells."

Authors: Majumder S,Zhu G,Xu X,Senchanthisai S,Jiang D,Liu H,Xue C,Wang X,Coia H,Cui Z,Smollock EM,Libby RT, Berk BC,Pang J

Year
2016

Species
Mouse

PloS one

Fbxw7 controls angiogenesis by regulating endothelial Notch activity.

"Published figure using VEGF Receptor 3 monoclonal antibody (Product # 16-5988-85) in Immunofluorescence"

Authors: Izumi N,Helker C,Ehling M,Behrens A,Herzog W,Adams RH

Year
2013

Species
Human

[View more WB references on thermofisher.cn](#)

Immunohistochemistry (10)

Life science alliance

VEGFR3 modulates brain microvessel branching in a mouse model of 22q11.2 deletion syndrome.

"Published figure using VEGF Receptor 3 monoclonal antibody (Product # 16-5988-85) in Immunohistochemistry"

Authors: Cioffi S,Flore G,Martucciello S,Bilio M,Turturo MG,illingworth E

Year
2022

Nature communications

Lipid droplet degradation by autophagy connects mitochondria metabolism to Prox1-driven expression of lymphatic genes and lymphangiogenesis.

"Published figure using VEGF Receptor 3 monoclonal antibody (Product # 16-5988-85) in Immunohistochemistry"

Authors: Meçe O,Houbaert D,Sassano ML,Durré T,Maes H,Schaaf M,More S,Ganne M,García-Caballero M,Borri M, Verhoeven J,Agrawal M,Jacobs K,Bergers G,Blacher S,Ghesquière B,Dewerchin M,Swinnen JV,Vinckier S,Soengas MS,Carmeliet P,Noël A,Agostinis P

Year
2022

[View more IHC references on thermofisher.cn](#)

More applications with references on thermofisher.cn

[IHC \(P\) \(1\)](#)

[Flow \(2\)](#)

[Misc \(2\)](#)

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