abcam

ab27851

Anti-TIE1 antibody [8C9]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human TIE1. The exact immunogen used to generate this antibody is proprietary information. Database link P35590
Carrier free	Yes
Clone number	8C9
Purification technique	Affinity purification Protein G
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	This antibody was purified from cell culture supernatant by chromatography.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1 µg for 10^6 Cells

Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Species	Recombinant fragment
Dilution info	1 µg for 10^6 Cells
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

WB

Tested

Species	Human
Dilution info	200000-500000 µg/mL
Notes	-

Species	Recombinant fragment
Dilution info	200000-500000 µg/mL
Notes	-

Target data

See full target information TIE1

Function	Transmembrane tyrosine-protein kinase that may modulate TEK/TIE2 activity and contribute to the regulation of angiogenesis.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot

Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	TIE1 also known as Tyrosine Kinase with Immunoglobulin-like and EGF-like Domains 1 plays a role as a receptor tyrosine kinase. It has a molecular mass of approximately 130 kDa. TIE1 is mainly expressed in vascular endothelial cells and is involved in the vascular system. It shares structural characteristics with other tyrosine kinases providing a framework for signaling and interaction. TIE1 activation involves phosphorylation leading to subsequent signaling cascades in endothelial cells.
Biological function summary	TIE1 associates with angiogenesis and blood vessel integrity. It forms a complex with other proteins notably TIE2 within the endothelial cells where it modulates endothelial cell survival and proliferation. Its role becomes particularly significant in dynamic environments where new blood vessel formation or remodeling occurs. TIE1 interacts with angiopoietins providing a network essential for maintaining vascular homeostasis and integrity.
Pathways	TIE1 interacts within angiopoietin-TIE signaling pathways. This pathway plays a critical role in vascular maturation and stability. TIE1 working in conjunction with TIE2 and the angiopoietins orchestrates the intricate balance between vessel stabilization and sprouting needed for healthy vascular function. These interactions link TIE1 with core processes in endothelial cell communication and vascular development.
Associated diseases and disorders	TIE1 shows association with cancer and atherosclerosis. Its interaction with TIE2 and angiopoietin proteins contributes to pathological angiogenesis often observed in tumor growth and progression. In atherosclerosis TIE1 influences endothelial dysfunction and vascular inflammation. These diseases highlight TIE1's contribution to pathological processes highlighting the importance of its precise regulation in maintaining vascular health.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

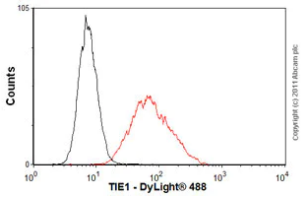
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1 product image



Flow Cytometry - Anti-TIE1 antibody [8C9] (ab27851)

TIE1 Flow Cytometry staining using mouse Anti-TIE1 antibody

Overlay histogram showing K562 cells stained with ab27851 (red line). The cells were fixed with 80% methanol (5 min) and then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab27851, 1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in K562 cells fixed with 4% paraformaldehyde (10 min) used under the same conditions.
Please note that Abcam do not have any data for use of this antibody on non-fixed cells. We welcome any customer feedback.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.