Anti-TIE2 Antibody [PSH06-63]

HA722732

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, FC
Molecular Wt:	Predicted band size: 126 kDa
Clone number:	PSH06-63

Description: Angiopoietin-1 receptor also known as CD202B (cluster of differentiation 202B) is a protein that in humans is encoded by the TEK gene. Also known as TIE2, it is an angiopoietin receptor. The TEK receptor tyrosine kinase is expressed almost exclusively in endothelial cells in mice, rats, and humans. (TEK is closely related to the TIE receptor tyrosine kinase). This receptor possesses a unique extracellular domain containing 2 immunoglobulin-like loops separated by 3 epidermal growth factor-like repeats that are connected to 3 fibronectin type III-like repeats. The ligand for the receptor is angiopoietin-1. TEK has also been suggested as a marker for nucleus pulposus progenitor cells, from the intervertebral disc, which upon activation by Angiopoietin-1 starts to multiply and differentiate. Defects in TEK are associated with inherited venous malformations; the TEK signaling pathway appears to be critical for endothelial cell-smooth muscle cell communication in venous morphogenesis. In cancer patients, TEK (Tie2) is expressed in a subpopulation of monocytes that home in on the tumor and are essential for the formation of new blood vessels there.

Immunogen: Recombinant protein within human TIE2 aa 1-769.

Positive control: EA.hy926 cell lysate, EA.hy926.

Subcellular location: Cell membrane, Cell junction, focal adhesion, Cytoplasm, cytoskeleton, Secreted.

Database links: SwissProt: Q02763 Human

Recommended Dilutions:

WB	1:1,000
FC	1:1,000

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

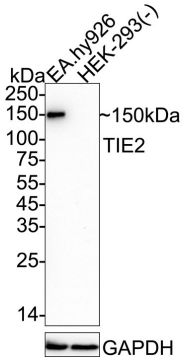

Fig1: Western blot analysis of TIE2 on different lysates with Rabbit anti-TIE2 antibody (HA722732) at 1/1,000 dilution.

Lane 1: EA.hy926 cell lysate
Lane 2: HEK-293 cell lysate (negative)

Lysates/proteins at 20 µg/Lane.

Predicted band size: 126 kDa
Observed band size: 150 kDa

Exposure time: 3 minutes; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA722732) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

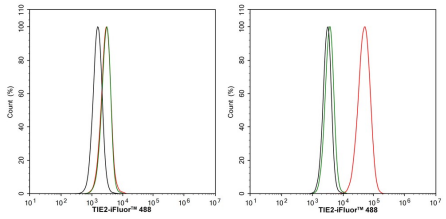

Fig2: Flow cytometric analysis of HEK-293 (left, negative) and EA.hy926 (right, positive) cells labeling TIE2.

Cells were washed twice with cold PBS and resuspend. Then stained with the primary antibody (HA722732, 1µg/mL) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4℃ for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4℃. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Du S et al. Tumor cell-derived exosomes deliver TIE2 protein to macrophages to promote angiogenesis in cervical cancer. Cancer Lett. 2022 Mar
2. Duran CL et al. Targeting Tie2 in the Tumor Microenvironment: From Angiogenesis to Dissemination. Cancers (Basel). 2021 Nov