abcam

ab52648

Anti-Flt3 ligand/Flt3L antibody [EP1140Y]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EP1140Y
Purification technique	Affinity purification Protein A
Specificity	The antibody has been tested against recombinant protein in western blotting, we do not have data regarding recognition of endogenous protein. We suggest K562 and HL-60 cells could be expressing Flt3 ligand/Flt3L. The antibody was raised against the extracellular domain of the protein, however please note permeabilisation in FACS greatly improves the signal.
Concentration	0.55 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human

Dilution info	1/180
Notes	-

Predicted

Species	Rhesus monkey
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/100000
Notes	-

Predicted

Species	Rhesus monkey
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100 - 1/250
Notes	-

Predicted

Species	Rhesus monkey
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/50
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Rhesus monkey
Dilution info	-
Notes	-

Target data

See full target information FLT3LG

Function	Stimulates the proliferation of early hematopoietic cells by activating FLT3. Synergizes well with a number of other colony stimulating factors and interleukins. Required for the development of B cells, and dendritic cells (DCs).

Storage

Shipped at conditions	Conditional Ambient
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

Notes

Species reactivity
Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Supplementary info

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

Activity summary	The Flt3 ligand (Flt3L) also known as Flt3-L Flt3 ligand protein or flt-3 ligand protein is a small cytokine with a molecular mass of approximately 18 to 19 kDa. It acts as a growth factor by binding to the Flt3 receptor tyrosine kinase on the surface of hematopoietic progenitor cells. Flt3L is expressed in various tissues including the bone marrow where it plays a significant role in hematopoiesis. It is critical in dendritic cell and B cell development impacting the immune response mechanism.
Biological function summary	The Flt3 ligand plays an essential role in the immune system. It is a monomeric cytokine that induces proliferation of early lineage cells within the hematopoietic system. Flt3L does not function as part of a complex but acts independently to stimulate the proliferation differentiation and survival of hematopoietic cells. By interacting directly with its receptor it significantly influences the innate and adaptive immune systems through the maturation of dendritic and B cells.
Pathways	The Flt3 ligand is involved in hematopoietic signaling pathways primarily the PI3K-Akt signaling pathway. This pathway is essential for cell survival and growth where Flt3L aids in transmitting growth signals necessary for hematopoietic cells. Flt3L also interacts with proteins such as FLT3 receptor and influences the downstream signaling cascade affecting cell fate decisions in hematopoiesis and immune cell maturation.
Associated diseases and disorders	Flt3 ligand is connected to leukemia particularly acute myeloid leukemia (AML) due to dysregulation of the FLT3 signaling pathway. Mutations in the FLT3 receptor can lead to uncontrolled cell proliferation contributing to tumorigenesis. Additionally Flt3L plays a role in autoimmune disorders by influencing immune cell development. It is closely connected with the FLT3 receptor and other tyrosine kinases which when mutated can exacerbate disease pathology through abnormal cell signaling and proliferation.

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.

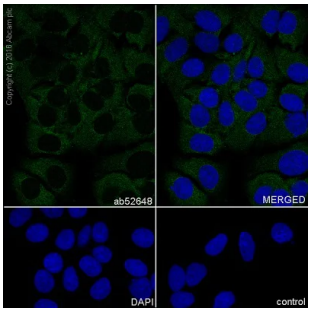
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

---

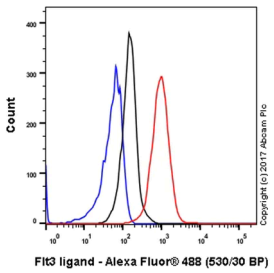
4 product images



Immunocytochemistry/ Immunofluorescence - Anti-Flt3 ligand/Flt3L antibody [EP1140Y] (ab52648)

Flt3 ligand/Flt3L Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Flt3 ligand/Flt3L antibody

Immunocytochemistry/ Immunofluorescence analysis of MCF7 (Human breast adenocarcinoma epithelial cell) cells labeling Flt3 ligand/Flt3L with Purified ab52648 at 1:100 dilution. Cells were fixed in 100% Methanol and permeabilized with None. ab150077 Goat anti rabbit IgG(Alexa Fluor ® 488) was used as the secondary antibody at 1:1000 dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

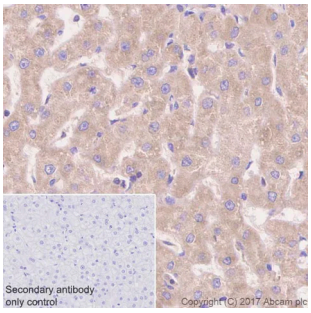


Flow Cytometry (Intracellular) - Anti-Flt3 ligand/Flt3L antibody [EP1140Y] (ab52648)

Flt3 ligand/Flt3L Flow Cytometry (Intracellular) staining using rabbit Anti-Flt3 ligand/Flt3L antibody

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized HeLa (Human cervix adenocarcinoma epithelial cell) cells labelling Flt3 ligand/Flt3L with ab52648 at 1/20 dilution (1µg) (Red) compared with a Rabbit monoclonal IgG (ab172730) / (Black) isotype

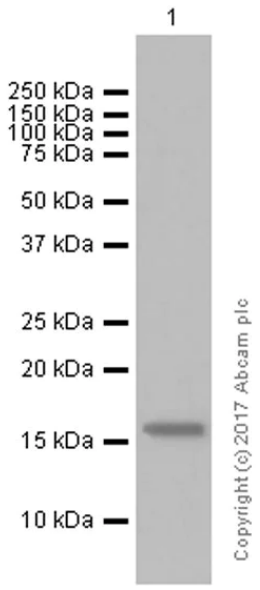
control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Flt3 ligand/Flt3L antibody [EP1140Y] (ab52648)

Flt3 ligand/Flt3L Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Flt3 ligand/Flt3L antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue sections labeling Flt3 ligand with purified ab52648 at 1:180 dilution (2.9 µg/ml). ab93684 (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used for detection. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Western blot - Anti-Flt3 ligand/Flt3L antibody [EP1140Y] (ab52648)

Blocking and diluting buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-Flt3 ligand/Flt3L antibody [EP1140Y] (ab52648) at 1/100000 dilution

All lanes:
Human Flt3 ligand/Flt3L (aa 1 to 235) recombinant protein, 15ng

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 26 kDa

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