abcam

ab232487

Anti-Flt3 ligand/Flt3L antibody [EP1140Y] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
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	1.025 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

WB

Tested

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Recombinant full length protein - Human

Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	ab199376-Rabbit monoclonal IgG (Low endotoxin, Azide free), is suitable for use as an isotype control with this antibody.

Not recommended

Species	Recombinant full length protein - Human
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	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab232487 is the carrier-free version of ab52648.

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.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

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

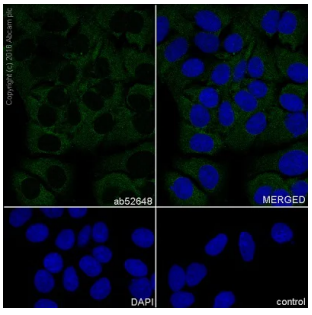
We do not recommend this combination. It is not covered by our product promise.

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.

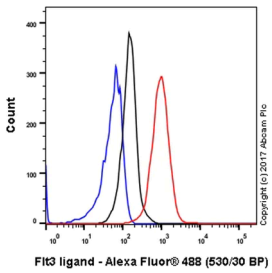
4 product images



Immunocytochemistry/ Immunofluorescence - Anti-Flt3 ligand/Flt3L antibody [EP1140Y] - BSA and Azide free (ab232487)

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

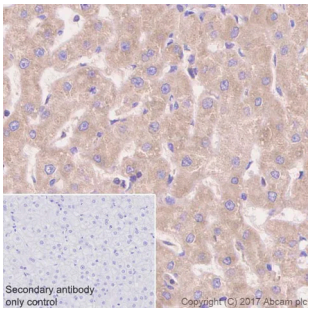
This data was developed using ab52648, the same antibody clone in a different buffer formulation. Immunocytochemistry/ Immunofluorescence analysis of MCF7 (Human breast adenocarcinoma epithelial cell) cells labeling Flt3 ligand/Flt3L with Purified ab52648 at 1:100 dilution. Cells were fixed in 100% Methanol 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] - BSA and Azide free (ab232487)

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

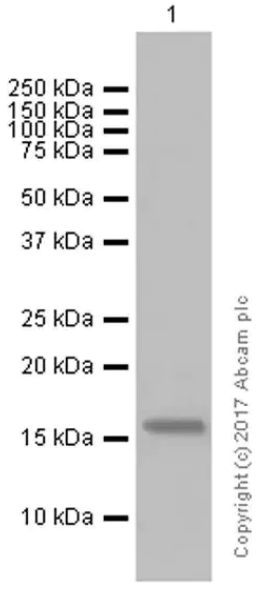
This data was developed using ab52648, the same antibody clone in a different buffer formulation. Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Flt3 ligand/Flt3L with purified ab52648 at 1/50 dilution. Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Flt3 ligand/Flt3L antibody [EP1140Y] - BSA and Azide free (ab232487)

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

This data was developed using ab52648, the same antibody clone in a different buffer formulation. Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue sections labeling Flt3 ligand/Flt3L with Purified ab52648 at 1:180 dilution. Heat mediated antigen retrieval was performed using ab93684 (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Western blot - Anti-Flt3 ligand/Flt3L antibody [EP1140Y] - BSA and Azide free (ab232487)

This data was developed using ab52648, the same antibody clone in a different buffer formulation. Blocking and diluting buffer: 5% NFDM/TBST.

All lanes:
Western blot - Anti-Flt3 ligand/Flt3L antibody [EP1140Y] - BSA and Azide free (ab232487) at 1/100000 dilution

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

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'.