

CD135 / FLT3 Antibody (Internal)

Rabbit Polyclonal Antibody Catalog # ALS15658

Specification

CD135 / FLT3 Antibody (Internal) - Product Information

Application IF
Primary Accession P36888
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 113kDa KDa

CD135 / FLT3 Antibody (Internal) - Additional Information

Gene ID 2322

Other Names

Receptor-type tyrosine-protein kinase FLT3, 2.7.10.1, FL cytokine receptor, Fetal liver kinase-2, FLK-2, Fms-like tyrosine kinase 3, FLT-3, Stem cell tyrosine kinase 1, STK-1, CD135, FLT3, CD135, FLK2, STK1

Target/Specificity

Human FLT3 / CD135. At least three isoforms of FLT3 are known to exist; this antibody will detect all isoforms.

Reconstitution & Storage

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions

CD135 / FLT3 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

CD135 / FLT3 Antibody (Internal) - Protein Information

Name FLT3

Synonyms CD135, FLK2, STK1

Function

Tyrosine-protein kinase that acts as a cell-surface receptor for the cytokine FLT3LG and regulates differentiation, proliferation and survival of hematopoietic progenitor cells and of dendritic cells. Promotes phosphorylation of SHC1 and AKT1, and activation of the downstream effector MTOR. Promotes activation of RAS signaling and phosphorylation of downstream kinases, including MAPK1/ERK2 and/or MAPK3/ERK1. Promotes phosphorylation of FES, FER, PTPN6/SHP, PTPN11/SHP-2, PLCG1, and STAT5A and/or STAT5B. Activation of wild-type FLT3 causes only marginal activation of STAT5A or STAT5B. Mutations that cause constitutive kinase activity promote cell proliferation and resistance to apoptosis via the activation of multiple signaling



pathways.

Cellular Location

Membrane; Single-pass type I membrane protein. Endoplasmic reticulum lumen. Note=Constitutively activated mutant forms with internal tandem duplications are less efficiently transported to the cell surface and a significant proportion is retained in an immature form in the endoplasmic reticulum lumen. The activated kinase is rapidly targeted for degradation

Tissue Location

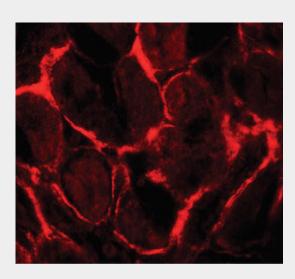
Detected in bone marrow, in hematopoietic stem cells, in myeloid progenitor cells and in granulocyte/macrophage progenitor cells (at protein level). Detected in bone marrow, liver, thymus, spleen and lymph node, and at low levels in kidney and pancreas. Highly expressed in T-cell leukemia

CD135 / FLT3 Antibody (Internal) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

CD135 / FLT3 Antibody (Internal) - Images

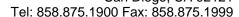


Immunofluorescence of FLT3 in human kidney tissue with FLT3 antibody at 20 ug/ml.

CD135 / FLT3 Antibody (Internal) - Background

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CD135 / FLT3 Antibody (Internal) - References

Small D., et al. Proc. Natl. Acad. Sci. U.S.A. 91:459-463(1994). Rosnet O., et al. Blood 82:1110-1119(1993). Dunham A., et al. Nature 428:522-528(2004). Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Rosnet O., et al. Genomics 9:380-385(1991).