ARG66845
anti-CD135 / Flt3 phospho (Tyr599) antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes CD135 / Flt3 phospho (Tyr599)
Tested Reactivity	Mk
Predict Reactivity	Hu, Ms
Tested Application	WB
Specificity	This antibody detects endogenous levels of Flt3 protein only when phosphorylated at Tyr599.
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	CD135 / Flt3
Species	Human
Immunogen	Phosphospecific peptide around Tyr599 (aa. 565-614) of Human CD135 / Flt3.
Conjugation	Un-conjugated
Alternate Names	CD135; FLK2; Receptor-type tyrosine-protein kinase FLT3; FLK-2; STK-1; STK1; FL cytokine receptor; FLT-3; Stem cell tyrosine kinase 1; Fetal liver kinase-2; Fms-like tyrosine kinase 3; CD antigen CD135; EC 2.7.10.1

Application Instructions

Application table

Application	Dilution
WB	1:500 - 1:2000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	COS7 + EGF
Observed Size	~ 160 kDa

Properties

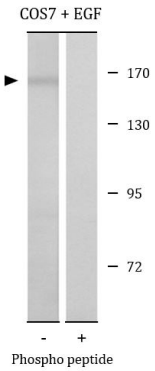
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS, 0.02% Sodium azide, 50% Glycerol and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol and 0.5% BSA
Concentration	1 mg/ml

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	FLT3
Gene Full Name	fms-related tyrosine kinase 3
Background	This gene encodes a class III receptor tyrosine kinase that regulates hematopoiesis. This receptor is activated by binding of the fms-related tyrosine kinase 3 ligand to the extracellular domain, which induces homodimer formation in the plasma membrane leading to autophosphorylation of the receptor. The activated receptor kinase subsequently phosphorylates and activates multiple cytoplasmic effector molecules in pathways involved in apoptosis, proliferation, and differentiation of hematopoietic cells in bone marrow. Mutations that result in the constitutive activation of this receptor result in acute myeloid leukemia and acute lymphoblastic leukemia. [provided by RefSeq, Jan 2015]
Function	Tyrosine-protein kinase that acts as 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. [UniProt]
Calculated Mw	113 kDa
PTM	N-glycosylated, contains complex N-glycans with sialic acid. Autophosphorylated on several tyrosine residues in response to FLT3LG binding. FLT3LG binding also increases phosphorylation of mutant kinases that are constitutively activated. Dephosphorylated by PTPRJ/DEP-1, PTPN1, PTPN6/SHP-1, and to a lesser degree by PTPN12. Dephosphorylation is important for export from the endoplasmic reticulum and location at the cell membrane. Rapidly ubiquitinated by UBE2L6 and the E3 ubiquitin-protein ligase SIAH1 after autophosphorylation, leading to its proteasomal degradation. [UniProt]
Cellular Localization	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. [UniProt]

Images



ARG66845 anti-CD135 / Flt3 phospho (Tyr599) antibody WB image

Western blot: COS7 cells treated with EGF (200 ng/ml for 30 min). Cell lysates were stained with ARG66845 anti-CD135 / Flt3 phospho (Tyr599) antibody. The lane on the right is blocked with the phospho peptide.