

# Product datasheet

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ARG66848 anti-CD135 / Flt3 phospho (Tyr969) antibody

Package: 100 μg Store at: -20°C

#### **Summary**

Product Description Rabbit Polyclonal antibody recognizes CD135 / Flt3 phospho (Tyr969)

Tested Reactivity Hu

Tested Application IHC-P, WB

Specificity This antibody detects endogenous levels of Flt3 protein only when phosphorylated at Tyr969.

Host Rabbit

**Clonality** Polyclonal

Isotype IgG

Target Name CD135 / Flt3

Species Human

Immunogen Phosphospecific peptide around Tyr969 (aa. 935-984) 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
	IHC-P	1:100 - 1:300
	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	HepG2 + Na3VO4	
Observed Size	~ 155 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

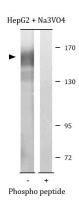
N-glycosylated, contains complex N-glycans with sialic acid.

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]

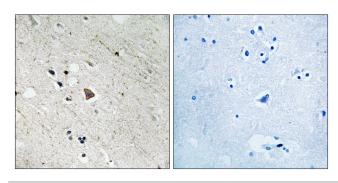
Cellular Localization

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]



## ARG66848 anti-CD135 / Flt3 phospho (Tyr969) antibody WB image

Western blot: HepG2 cells treated with Na3VO4 (0.3 mM for 40 min). Cell lysates were stained with ARG66848 anti-CD135 / Flt3 phospho (Tyr969) antibody. The lane on the right is blocked with the phospho peptide.



## ARG66848 anti-CD135 / Flt3 phospho (Tyr969) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human brain tissue stained with ARG66848 anti-CD135 / Flt3 phospho (Tyr969) antibody. The picture on the right is blocked with the phospho peptide.