

ARG82733 Human CD135 / FLT3 ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG82733-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG82733-002	Standard	2 X 10 ng/vial	4°C
ARG82733-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG82733-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG82733-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG82733-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG82733-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG82733-008	25X Wash buffer	20 ml	4°C
ARG82733-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG82733-010	STOP solution	10 ml (Ready to use)	4°C
ARG82733-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG82733 Human CD135 / FLT3 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human CD135 / FLT3 in serum, plasma (EDTA, heparin) and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Target Name	CD135 / FLT3
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	50 pg/ml
Sample Type	Serum, plasma (EDTA, heparin) and cell culture supernatants.
Standard Range	62.5 - 4000 pg/ml
Sample Volume	100 µl
Precision	Intra-Assay CV: 4.8% Inter-Assay CV: 6.6%

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

Assay Time ~ 5 hours

Properties

Form 96 well

Storage instruction Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.

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]

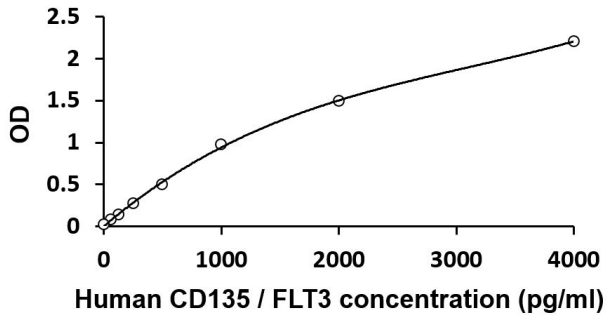
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PTM N-glycosylated, contains complex N-glycans with sialic acid.

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]



ARG82733 Human CD135 / FLT3 ELISA Kit standard curve image

ARG82733 Human CD135 / FLT3 ELISA Kit results of a typical standard run with optical density reading at 450 nm.
