www.swbio.com



## Catalog Number: 21187-1, 21187-2

Amount: 50µg/50µl, 100µg/100µl

Swiss-Prot No. : P36888

**Form of Antibody:** Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl,0.02% sodium azide and 50% glycerol.

**Storage/Stability:** Store at -20°C/1 year

**Immunogen:** The antiserum was produced against synthesized non-phosphopeptide derived from Human FLT3 around the phosphorylation site of tyrosine 591 (Y-F-YP-V-D)

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Specificity/Sensitivity:FLT3 (Ab-591) Antibody detects endogenous levels of total FLT3 protein.

Reactivity: Human

## Applications:

Predicted MW: 130 160 kd WB: 1:500~1:1000 IF: 1:100~1:1000



Western blot analysis of extracts from 293 and MCF cells using FLT3(Ab-591) Antibody #21187.



Immunofluorescence staining of methanol-fixed HeLa cells using FLT3 (Ab-591) Antibody (#21187, Red).

## Background :

FLT3 encodes a class III receptor tyrosine kinase that regulates hematopoiesis. The receptor consists of an extracellular domain composed of five immunoglobulin-like domains, one transmembrane region, and a cytoplasmic kinase domain split into two parts by a kinase-insert domain. The 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.

## References:

Sekine S et,al. (2008) J Immunol. ;180(12):8126-34 Pratz K et,al. (2008) Leuk Lymphoma. 2008 ;49(5):852-63. Al Shaer L et,al. (2008) Br J Haematol. 141(4):483-93.