

Rabbit anti FLT1 Peptide Polyclonal Antibody

Alternative Name(s): FLT-1, VEGFR-1; fms-related tyrosine kinase 1

Order Information

Description: FLT1 Peptide
Catalogue: 602-450
Lot: See label
Size: 100ug/200ul
Host: Rabbit
Clone: nan

• Application: IHC(P), ELISA

• Reactivity: Hu

ANTIGEN PREPARATION

A synthetic peptide corresponding to FLT1 peptide GNQWFI.

BACKGROUND

A hexapeptide, anti-Flt1 (Gly-Asn-Gln-Trp-Phe-Ile or GNQWFI), was identified from peptide libraries. The anti-Flt1 peptide shows specificity toward binding to VEGFR1 and it inhibits binding of VEGF, placental growth factor (PIGF), and VEGF/PIGF heterodimer to VEGFR1. This peptide does not inhibit the proliferation of endothelial cells induced by VEGF and VEGF/PIGF heterodimer but it effectively blocks VEGF-induced migration of endothelial cells and their capacity to form capillary-like structures on fibrin gel-based in vitro angiogenesis system. Furthermore, growth and metastasis of VEGF-secreting tumor cells were also significantly inhibited by s.c. injections of anti-Flt1 peptide in nude mice. Accordingly, VEGF-induced migration and capillary formation are mediated through VEGFR1, and these processes may play an important role in the growth and metastasis of VEGF-secreting tumors. A peptide (anti-Flt1) specific for VEGFR1 inhibits growth and metastasis of tumor that secretes VEGF. The receptor 1-specific peptide antagonist, anti-Flt1, has potential as a therapeutic agent for various angiogenesis-related diseases, especially cancer.

PURIFICATION

The Rabbit IgG is purified by Epitope Affinity Purification

FORMULATION

This affinity purified antibody is supplied in sterile Phosphatebuffered saline (pH7.2) containing antibody stabilizer

SPECIFICITY

This antibody recognizes human FLT1 Peptide protein. The other species are not tested.

STORAGE

The antibodies are stable for 24 months from date of receipt when stored at -20oC to -70oC. The antibodies can be stored at 2oC-8oC for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

APPLICATIONS/SUGGESTED WORKING DILUTIONS*

• Western Blot: 0.1-1 μg/ml

• ELISA: 0.01-0.1 μg/ml

Immunoprecipitation: 2-5 μg/ml

• IHC: 2-10 µg/ml

Flow cytometry: Not tested

• Molecular Weight: 96.0

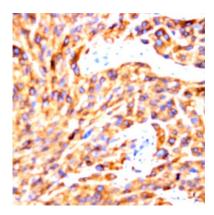
• Positive Control: Kidney Tissue

· Cellular Location: Cell Membrane



*Optimal dilutions should be determined by researchers for the specific applications.





Immunohistochemistry: Human GIST carcinoma (FFPE) stained with Rabbit anti-FLT1 peptide (Cat# 602-450) at 1:200 for 10 min @ RT. Staining of formalin-fixed tissue requires boiling tissue sections in 10 mM Citrate Buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min.

REFERENCES

Dong-Goo Bae; Tae-Dong Kim, Ge Li, Wan-Hee Yoon, Chi-Bom Chae; Anti-flt1 peptide, a vascular endothelial growth factor receptor 1-specific hexapeptide, inhibits tumor growth and metastasis; Clin Cancer Res; 2005 Apr 1;11(7):2651-61.