

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human VEGFR3/Flt-4 in direct ELISAs and Western blots. In Western blots, approximately 15% cross-reactivity with recombinant mouse VEGFR3 is observed and less than 2% cross-reactivity with recombinant human VEGFR1 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human VEGFR3/Flt-4 Tyr25-Ile776 Accession # P35916
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

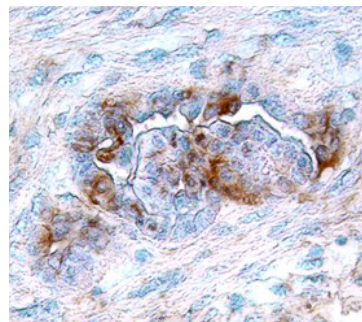
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human VEGFR3/Flt-4 Fc Chimera (Catalog # 349-F4)
Immunohistochemistry	5-15 µg/mL	See Below

DATA

Immunohistochemistry



VEGFR3/Flt-4 in Human Cervical Squamous Metaplasia. VEGFR3/Flt-4 was detected in immersion fixed paraffin-embedded sections of human cervical squamous metaplasia using Human VEGFR3/Flt-4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF349) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

VEGFR2 (KDR/Flk-1), VEGFR1 (Flt-1) and VEGFR3 (Flt-4) belong to the class III subfamily of receptor tyrosine kinases (RTKs). All three receptors contain seven immunoglobulin-like repeats in their extracellular domains and kinase insert domains in their intracellular regions. The expression of VEGFR1, 2, and 3 is almost exclusively restricted to the endothelial cells. These receptors are likely to play essential roles in vasculogenesis and angiogenesis.

VEGFR3 cDNA encodes a 1298 amino acid (aa) residue precursor protein with a 24 aa residue signal peptide. Mature VEGFR3 is composed of a 751 aa residue extracellular domain, a 22 aa residue transmembrane domain and a 482 aa residue cytoplasmic domain. Both VEGF-C and VEGF-D have been shown to bind and activate VEGFR3 (Flt-4). VEGFR3 is widely expressed in the early embryo but becomes restricted to lymphatic endothelia at later stages of development. It is likely that VEGFR3 may be important for lymph angiogenesis.

References:

1. Ferrà, N. and R. Davis-Smyth (1997) *Endocrine Reviews* **18**:4.