

# Immunotag™ Flk-1 Polyclonal Antibody

| Antibody Specification |                                                                                                                                                                                                      |
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| Catalog No.            | ITT1722                                                                                                                                                                                              |
| Product Description    | Immunotag™ Flk-1 Polyclonal Antibody                                                                                                                                                                 |
| Size                   | 50 µg, 100 µg                                                                                                                                                                                        |
| Conjugation            | HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647                                                                        |
| IMPORTANT NOTE         | This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.                                   |
| Target Protein         | Flk-1                                                                                                                                                                                                |
| Clonality              | Polyclonal                                                                                                                                                                                           |
| Storage/Stability      | -20°C/1 year                                                                                                                                                                                         |
| Application            | WB,IHC-p,IF,ELISA                                                                                                                                                                                    |
| Recommended Dilution   | Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.                                         |
| Concentration          | 1 mg/ml                                                                                                                                                                                              |
| Reactive Species       | Human,Mouse,Rat                                                                                                                                                                                      |
| Host Species           | Rabbit                                                                                                                                                                                               |
| Immunogen              | Synthesized peptide derived from Flk-1, at AA range: 1150-1230                                                                                                                                       |
| Specificity            | Flk-1 Polyclonal Antibody detects endogenous levels of Flk-1 protein.                                                                                                                                |
| Purification           | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen                                                                                 |
| Form                   | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                              |
| Gene Name              | KDR                                                                                                                                                                                                  |
| Accession No.          | P35968 P35918 O08775                                                                                                                                                                                 |
| Alternate Names        | KDR; FLK1; VEGFR2; Vascular endothelial growth factor receptor 2; VEGFR-2; Fetal liver kinase 1; FLK-1; Kinase insert domain receptor; KDR; Protein-tyrosine kinase receptor flk-1; CD antigen CD309 |

## Antibody Specification

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| Description                 | kinase insert domain receptor(KDR) Homo sapiens Vascular endothelial growth factor (VEGF) is a major growth factor for endothelial cells. This gene encodes one of the two receptors of the VEGF. This receptor, known as kinase insert domain receptor, is a type III receptor tyrosine kinase. It functions as the main mediator of VEGF-induced endothelial proliferation, survival, migration, tubular morphogenesis and sprouting. The signalling and trafficking of this receptor are regulated by multiple factors, including Rab GTPase, P2Y purine nucleotide receptor, integrin alphaVbeta3, T-cell protein tyrosine phosphatase, etc.. Mutations of this gene are implicated in infantile capillary hemangiomas. [provided by RefSeq, May 2009],                                                                                                                                |
| Cell Pathway/<br>Category   | Cytokine-cytokine receptor interaction,Endocytosis,VEGF,Focal adhesion,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Protein<br>Expression       | Aorta endothelial cell,Lung,Umbilical vein,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Subcellular<br>Localization | extracellular region,nucleus,endosome,early endosome,endoplasmic reticulum,Golgi apparatus,plasma membrane,integral component of plasma membrane,integral component of membrane,cytoplasmic, membrane-bounded vesicle,cell junction,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Protein Function            | catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,function:Receptor for VEGF or VEGFC. Has a tyrosine-protein kinase activity. The VEGF-kinase ligand/receptor signaling system plays a key role in vascular development and regulation of vascular permeability. In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis in Kaposi's sarcoma lesions.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family. CSF-1/PDGF receptor subfamily.,similarity:Contains 1 protein kinase domain.,similarity:Contains 7 Ig-like C2-type (immunoglobulin-like) domains.,subunit:Interacts with MYOF (By similarity). Interacts with SHB; upon VEGF activation. Interacts with HIV-1 Tat., |
| Usage                       | For Research Use Only! Not for diagnostic or therapeutic procedures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |