

ARG42777 anti-FLT1 / VEGFR1 antibody

Package: 100 µl
Store at: -20°C

Summary

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|---------------------|---|
| Product Description | Rabbit Polyclonal antibody recognizes FLT1 / VEGFR1 |
| Tested Reactivity | Hu, Ms, Rat |
| Tested Application | IHC-P, IP, WB |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | IgG |
| Target Name | FLT1 / VEGFR1 |
| Species | Human |
| Immunogen | Synthetic peptide of Human FLT1 / VEGFR1. |
| Conjugation | Un-conjugated |
| Alternate Names | FLT-1; Vascular permeability factor receptor; Tyrosine-protein kinase receptor FLT; FLT; Vascular endothelial growth factor receptor 1; VEGFR1; VEGFR-1; Fms-like tyrosine kinase 1; EC 2.7.10.1; Tyrosine-protein kinase FRT |

Application Instructions

| Application table | Application | Dilution |
|-------------------|--|----------|
| | IHC-P | 1:50 |
| | IP | 1:20 |
| | WB | 1:1000 |
| Application Note | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. | |
| Positive Control | HeLa | |
| Observed Size | ~ 160 kDa | |

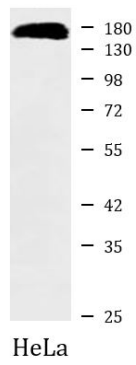
Properties

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| Form | Liquid |
| Purification | Affinity purified. |
| Buffer | 50 mM Tris-Glycine (pH 7.4), 150 mM NaCl, 0.01% Sodium azide, 40% Glycerol and 0.05% BSA. |
| Preservative | 0.01% Sodium azide |
| Stabilizer | 40% Glycerol and 0.05% BSA |
| Concentration | Batch dependent |

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| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use. |
| Note | For laboratory research only, not for drug, diagnostic or other use. |

Bioinformation

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|------------------------------|---|
| Gene Symbol | FLT1 |
| Gene Full Name | fms-related tyrosine kinase 1 |
| Function | <p>Tyrosine-protein kinase that acts as a cell-surface receptor for VEGFA, VEGFB and PGF, and plays an essential role in the development of embryonic vasculature, the regulation of angiogenesis, cell survival, cell migration, macrophage function, chemotaxis, and cancer cell invasion. May play an essential role as a negative regulator of embryonic angiogenesis by inhibiting excessive proliferation of endothelial cells. Can promote endothelial cell proliferation, survival and angiogenesis in adulthood. Its function in promoting cell proliferation seems to be cell-type specific. Promotes PGF-mediated proliferation of endothelial cells, proliferation of some types of cancer cells, but does not promote proliferation of normal fibroblasts (in vitro). Has very high affinity for VEGFA and relatively low protein kinase activity; may function as a negative regulator of VEGFA signaling by limiting the amount of free VEGFA and preventing its binding to KDR. Likewise, isoforms lacking a transmembrane domain, such as isoform 2, isoform 3 and isoform 4, may function as decoy receptors for VEGFA. Modulates KDR signaling by forming heterodimers with KDR. Ligand binding leads to the activation of several signaling cascades. Activation of PLCG leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate and the activation of protein kinase C. Mediates phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase, leading to activation of phosphatidylinositol kinase and the downstream signaling pathway. Mediates activation of MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling pathway, as well as of the AKT1 signaling pathway. Phosphorylates SRC and YES1, and may also phosphorylate CBL. Isoform 1 phosphorylates PLCG. Promotes phosphorylation of AKT1 at 'Ser-473'. Promotes phosphorylation of PTK2/FAK1. Isoform 7 has a truncated kinase domain; it increases phosphorylation of SRC at 'Tyr-418' by unknown means and promotes tumor cell invasion. [UniProt]</p> |
| Calculated Mw | 151 kDa |
| PTM | <p>N-glycosylated.</p> <p>Ubiquitinated after VEGFA-mediated autophosphorylation, leading to proteolytic degradation.</p> <p>Autophosphorylated on tyrosine residues upon ligand binding. Autophosphorylation occurs in trans, i.e. one subunit of the dimeric receptor phosphorylates tyrosine residues on the other subunit. Phosphorylation at Tyr-1169 is important for interaction with PLCG. Phosphorylation at Tyr-1213 is important for interaction with PIK3R1, PTPN11, GRB2, and PLCG. Phosphorylation at Tyr-1333 is important for endocytosis and for interaction with CBL, NCK1 and CRK. Is probably dephosphorylated by PTPRB. [UniProt]</p> |
| Cellular Localization | <p>Isoform 1: Cell membrane; Single-pass type I membrane protein. Endosome.</p> <p>Note=Autophosphorylation promotes ubiquitination and endocytosis. Isoform 2: Secreted. Isoform 3: Secreted. Isoform 4: Secreted. Isoform 5: Cytoplasm. Isoform 6: Cytoplasm. Isoform 7: Cytoplasm. [UniProt]</p> |



ARG42777 anti-FLT1 / VEGFR1 antibody WB image

Western blot: HeLa cell lysate stained with ARG42777 anti-FLT1 / VEGFR1 antibody at 1:1000 dilution.