

DOK1 Antibody

Catalog # ASC10005

Specification

DOK1 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Application Notes WB, IF, ICC, E <u>Q99704</u> <u>AAC51127</u>, <u>1848277</u> Human Rabbit Polyclonal IgG 62 kDa KDa DOK1 antibody can be used for detection of DOK1 expression by Western blot at 1 µg/mL. A 62 kDa band should be detected. Antibody can also be used for immunocytochemistry starting at 2 µg/mL. For immunofluorescence start at 10 µg/mL.

DOK1 Antibody - Additional Information

Gene ID 7011 Other Names DOK1 Antibody: TP1, TLP1, p240, TROVE1, VAULT2, Docking protein 1, Downstream of tyrosine kinase 1, telomerase-associated protein 1

Target/Specificity TEP1;

Reconstitution & Storage

DOK1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions DOK1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

DOK1 Antibody - Protein Information

Name DOK1

Function

DOK proteins are enzymatically inert adaptor or scaffolding proteins. They provide a docking platform for the assembly of multimolecular signaling complexes. DOK1 appears to be a negative regulator of the insulin signaling pathway. Modulates integrin activation by competing with talin for the same binding site on ITGB3.



Cellular Location [Isoform 1]: Cytoplasm. Nucleus.

Tissue Location

Expressed in pancreas, heart, leukocyte and spleen. Expressed in both resting and activated peripheral blood T-cells Expressed in breast cancer.

DOK1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

DOK1 Antibody - Images



Western blot analysis of DOK1 in Jurkat (Jur) and THP-1 (THP) cell lysates with DOK1 antibody at 1 μ g/mL.





Immunocytochemistry of DOK1 in K562 cells with DOK1 antibody at 2 μ g/mL.



Immunofluorescence of DOK1 in K562 cells with DOK1 antibody at 10 μ g/ml.

DOK1 Antibody - Background

DOK1 Antibody: Signals from most growth factors and cytokines are transduced by receptor tyrosine kinases or non-receptor tyrosine kinases. Activated tyrosine kinases phosphorylate their substrates, which mediate the cellular response to extracellular stimuli. A long-sought major substrate termed p62dok (downstream of tyrosine kinase) for many tyrosine kinases including c-kit, v-abl, v-Fps, v-Src, v-Fms, and activated EGF, PDGF, IGF, VEGF and insulin receptors was identified recently from human and mouse by several laboratories. Upon phosphorylation, p62dok forms a complex with the ras GTPase-activating protein (RasGAP). p62dok represents a new family with very recently identified p56dok.

DOK1 Antibody - References

Carpino N, Wisniewski D, Strife A, Marshak D, Kobayashi R, Stillman B, Clarkson B p62(dok): a constitutively tyrosine-phosphorylated, GAP-associated protein in chronic myelogenous leukemia progenitor cells. Cell 1997;88:197-204.

Yamanashi Y, Baltimore D Identification of the Abl- and rasGAP-associated 62 KDa protein as a docking protein, Dok. Cell 1997;88:205-211.

Holland SJ, Gale NW, Gish GD, Roth RA, Songyang Z, Cantley LC, Henkemeyer M, Yancopoulos GD, Pawson T. Juxtamembrane tyrosine residues couple the Eph family receptor EphB2/Nuk to specific SH2 domain proteins in neuronal cells. EMBO J 1997;16:3877-3888.

Di Cristofano A, Carpino N, Dunant N, Friedland G, Kobayashi R, Strife A, Wisniewski D, Clarkson B, Pandolfi PP, Resh MD. Molecular cloning and characterization of p56(dok-2) defines a new family of RasGAP-binding proteins. J Biol Chem 1998;273:4827-4830.