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AP02521PU-N Polyclonal Antibody to DOK2 / p56 dok2 pTyr299 - Aff - Purified

Alternate names: Docking protein 2, Downstream of tyrosine kinase 2, p56(dok-2), p56Dok-2

Quantity: 0.1 mg

Concentration: 1.0 mg/ml

Background: Docking proteins interact with receptor tyrosine kinases and mediate particular biological responses using signal transduction. DOK2 acts as a multiple docking protein downstream of receptor or non-receptor tyrosine kinases. By this mechanism it acts to negatively regulate signal transduction and cell proliferation controlled by cytokines in a feedback loop. DOK2 is highly expressed in cells and tissues of hematopoietic origin as well as in lung. Expression of bcr/abl induces additional tyrosine phosphorylation of the DOK1 and DOK2 proteins and their association with Ras-GAP. Thus, it is suspected that DOK association regulates GAP activity toward Ras and that the DOK proteins serve as mediators of bcr-abl signaling. The role of DOK proteins in bcr-abl regulation may also be implicated in chronic myelogenous leukemia (CML), which is characterized by a Philadelphia chromosome translocation t(9;22). Such a mutation would result in a p210-bcr/abl chimeric protein-tyrosine kinase which has been found in many CML cases.

Uniprot ID: O60496

NCBI: NP_003965.2

GeneID: 9046

Host: Rabbit

Immunogen: The antiserum was produced against synthesized phosphopeptide derived from human p56Dok-2 around the phosphorylation site of tyrosine 299 (G-E-Y*P*-A-V).

Format:
State: Liquid purified Ig fraction.
Purification: Affinity Chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatogramphy using non-phosphopeptide corresponding to the phosphorylation site.
Buffer System: PBS(without Mg2+ and Ca2+), pH 7.4 containing 150mM NaCl, 0.02% sodium azide and 50% glycerol

Applications:
Western Blot: 1/500-1/1000.
Immunofluorescence: 1/100-1/200.
Immunohistochemistry on Paraffin-Embedded Sections: 1/50-1/100.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:
This antibody detects endogenous levels of p56Dok-2 only when phosphorylated at Tyrosine 299.
Species: Human.
Other species not tested.

For research and in vitro use only. Not for diagnostic or therapeutic work.
Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Storage:

Store the antibody (in aliquots) at -20°C.
Avoid repeated freezing and thawing.
Shelf life: One year from despatch.

General Readings:

1. Feng Cong, et,al. (1999) Mol. Cell. Biol ; 19: 8314 - 8325.
2. Serge Lemay, et,al. (2000) Mol. Cell. Biol ; 20: 2743 - 2754.
3. Ute Schaeper, et,al.(2000) J. Cell Biol ; 149: 1419.
4. Miyuki Honma, et,al. (2006) Genes Cells; 11: 143 - 151.

Pictures:

Figure 1. Immunohistochemical analysis of paraffin- embedded human breast carcinoma tissue, using p56Dok-2 pTyr299 antibody AP02521PU.

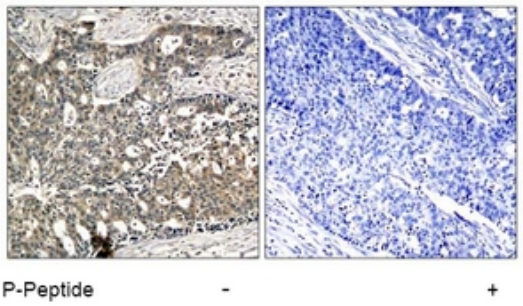

Figure 3. Immunofluorescence staining of methanol-fixed HeLa cells using p56Dok-2 pTyr299 antibody AP02521PU (Red).

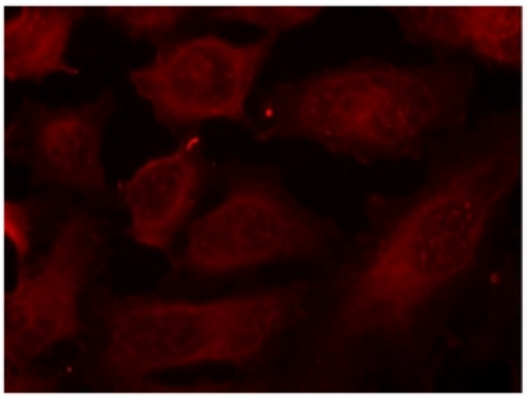

Figure 2. Western blot analysis of extracts from K562 cells, using p56Dok-2 antibody AP02769PU (Line 1 and 2) and p56Dok-2 pTyr299 antibody AP02521PU (Line 3 and 4).