

Product datasheet for **AP02521PU-N**

DOK2 pTyr299 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	Western Blot: 1/500-1/1000. Immunofluorescence: 1/100-1/200. Immunohistochemistry on Paraffin-Embedded Sections: 1/50-1/100.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	The antiserum was produced against synthesized phosphopeptide derived from human p56Dok-2 around the phosphorylation site of tyrosine 299 (G-E-YP-A-V).
Specificity:	This antibody detects endogenous levels of p56Dok-2 only when phosphorylated at Tyrosine 299.
Formulation:	PBS(without Mg ²⁺ and Ca ²⁺), pH 7.4 containing 150mM NaCl, 0.02% sodium azide and 50% glycerol State: Aff - Purified State: Liquid purified Ig fraction.
Concentration:	lot specific
Purification:	Affinity Chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.
Conjugation:	Unconjugated
Storage:	Store the antibody (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.
Gene Name:	docking protein 2
Database Link:	Entrez Gene 9046 Human O60496



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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.

Synonyms:

p56(dok-2), p56Dok-2, Docking protein 2

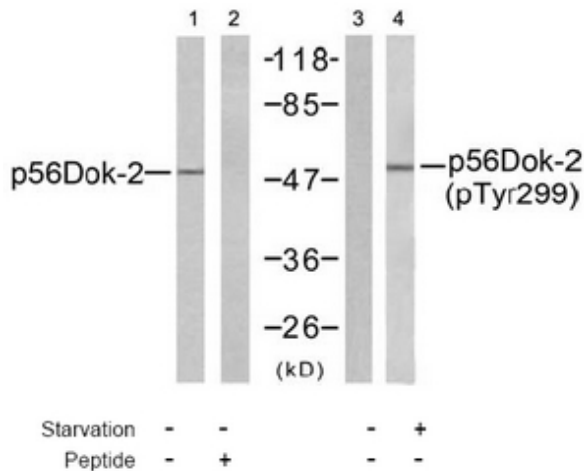
Product images:


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

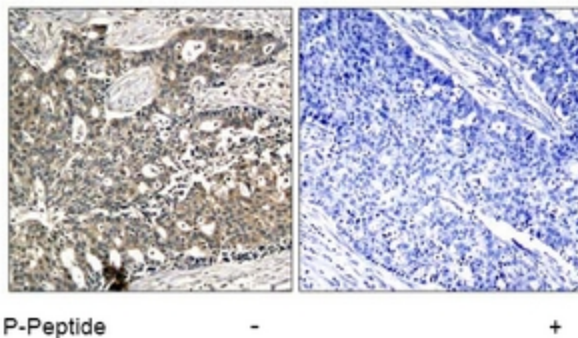


Figure 1. Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue, using p56Dok-2 pTyr299 antibody.

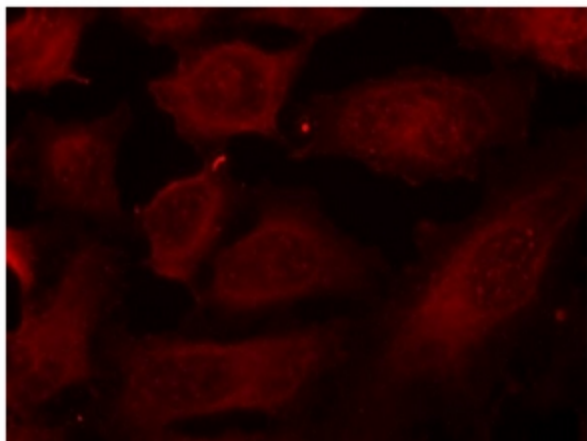


Figure 3. Immunofluorescence staining of methanol-fixed HeLa cells using p56Dok-2 pTyr299 antibody (Red).