

## Product datasheet for **AP02521PU-N**

### **DOK2 pTyr299 Rabbit Polyclonal Antibody**

#### **Product data:**

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



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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:**

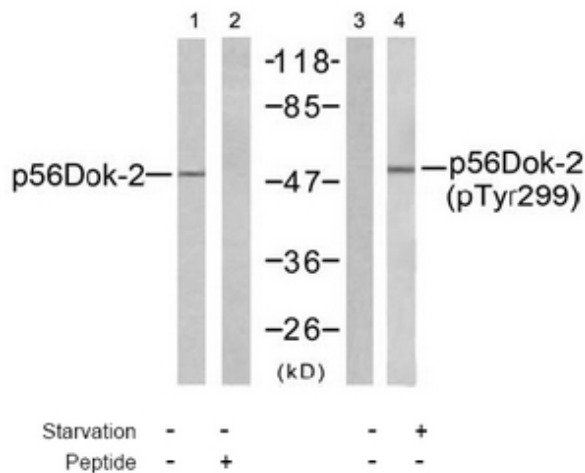


Figure 2. Western blot analysis of extracts from K562 cells, using p56Dok-2 antibody (Line 1 and 2) and p56Dok-2 pTyr299 antibody (Line 3 and 4).

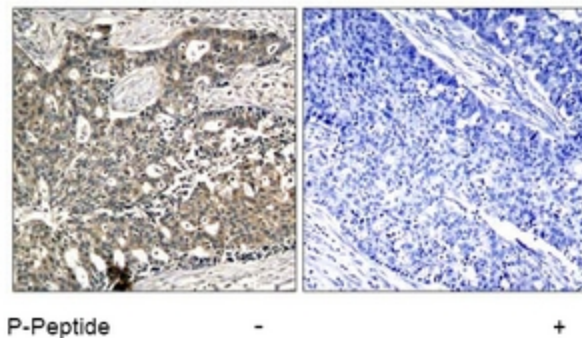


Figure 1. Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue, using p56Dok-2 pTyr299 antibody.

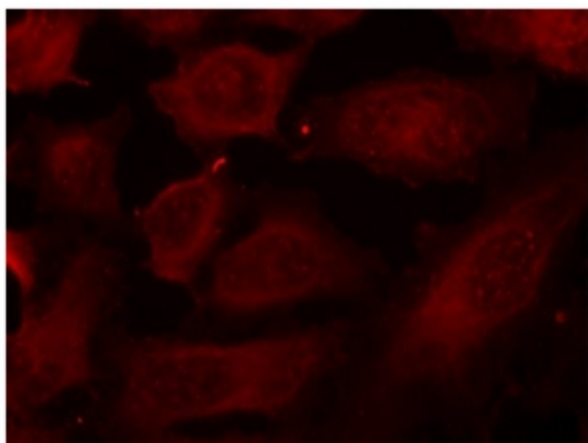


Figure 3. Immunofluorescence staining of methanol-fixed HeLa cells using p56Dok-2 pTyr299 antibody (Red).