

# Prostate Apoptosis Response protein-4 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP50009

## **Product Information**

Application	WB, IHC
Primary Accession	<u>Q96IZ0</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Calculated MW	36568

#### **Additional Information**

Gene ID	5074
Other Names	PRKC apoptosis WT1 regulator protein, Prostate apoptosis response 4 protein, Par-4, PAWR, PAR4
Dilution	WB~~ 1:1000 IHC~~1:50-1:100
Format	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.
Storage Conditions	-20°C

#### **Protein Information**

Name Synonyms	PAWR PAR4
Function	Pro-apoptotic protein capable of selectively inducing apoptosis in cancer cells, sensitizing the cells to diverse apoptotic stimuli and causing regression of tumors in animal models. Induces apoptosis in certain cancer cells by activation of the Fas prodeath pathway and coparallel inhibition of NF-kappa-B transcriptional activity. Inhibits the transcriptional activation and augments the transcriptional repression mediated by WT1. Down-regulates the anti- apoptotic protein BCL2 via its interaction with WT1. Also seems to be a transcriptional repressor by itself. May be directly involved in regulating the amyloid precursor protein (APP) cleavage activity of BACE1.
Cellular Location	Cytoplasm. Nucleus. Note=Mainly cytoplasmic in absence of apoptosis signal and in normal cells. Nuclear in most cancer cell lines. Nuclear entry seems to be essential but not sufficient for apoptosis (By similarity). Nuclear localization includes nucleoplasm and PML nuclear bodies.

Widely expressed. Expression is elevated in various neurodegenerative diseases such as amyotrophic lateral sclerosis, Alzheimer, Parkinson and Huntington diseases and stroke. Down-regulated in several cancers.

# Background

Pro-apoptopic protein capable of selectively inducing apoptosis in cancer cells, sensitizing the cells to diverse apoptotic stimuli and causing regression of tumors in animal models. Induces apoptosis in certain cancer cells by activation of the Fas prodeath pathway and coparallel inhibition of NF-kappa-B transcriptional activity. Inhibits the transcriptional activation and augments the transcriptional repression mediated by WT1. Down- regulates the anti-apoptotic protein BCL2 via its interaction with WT1. Seems also to be a transcriptional repressor by itself. May be directly involved in regulating the amyloid precursor protein (APP) cleavage activity of BACE1.

### References

Johnstone R.W.,et al.Mol. Cell. Biol. 16:6945-6956(1996). Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases. Hsu S.-C.,et al.Gene 295:109-116(2002). Chakraborty M.,et al.Cancer Res. 61:7255-7263(2001). Chang S.,et al.FEBS Lett. 510:57-61(2002).

#### Images



Western blot analysis of lysate from SW620 cell line, using Prostate Apoptosis Response protein-4 Antibody(C0309). C0309 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysate at 35ug.



Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue using Prostate Apoptosis Response Protein-4 antibody.





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