

Rabbit PAR4 Polyclonal Antibody | anti-PAR4 antibody

Phospho-PAR4 (Thr163) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA31375	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Zebrafish (92%), Rabbit (100%), Chicken (100%), Xenopus (92%)	Western Blot, Immunohistochemistry, Immunofluorescence, Immunocytochemistry, ELISA

PRODUCT SYNONYMS

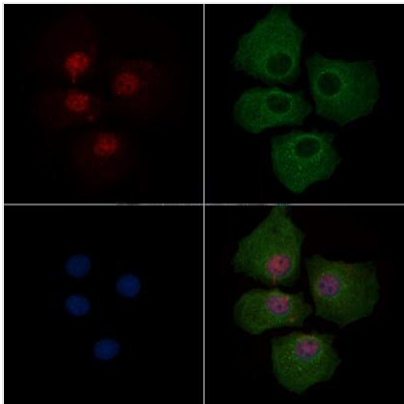
PAR4; Polyclonal Antibody; Phospho-PAR4 (Thr163) Antibody; 2310001G03Rik; PAR 4; PAR-4; Pawr; PAWR_HUMAN; PRKC Apoptosis WT1 Regulator; PRKC apoptosis WT1 regulator protein; Prostate apoptosis response 4 protein; Prostate apoptosis response protein 4; prostate apoptosis response protein PAR-4; Transcriptional repressor Par-4-like protein PAWR; Transcriptional repressor PAR4; WT1 Interacting Protein; anti-PAR4 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Zebrafish (92%), Rabbit (100%), Chicken (100%), Xenopus (92%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-PAR4 (Thr163) Antibody detects endogenous levels of PAR4 only when phosphorylated at Thr163. Tissue Specificity: 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.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-PAR4 antibody	WB (Western Blot), IHC (Immunohistochemistry), IF (Immunofluorescence), ICC (Immunocytochemistry), ELISA (Peptide ELISA)
Application Notes	WB: 1:500-1:2000 IF/ICC: 1:100-1:500 IHC: 1:50-1:200 Peptide ELISA: 1:20,000-1:40,000
Immunogen	A synthesized peptide derived from human PAR4 around the phosphorylation site of Thr163.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Preferentially phosphorylated at the Thr-163 by PKC in cancer cells.
Subunit Structure	Homooligomer. Interacts (via the C-terminal region) with WT1. Interacts with THAP1. Interacts with AATF. Interacts with BACE1. Interacts with SPSB1 (via B30.2/SPRY domain); this interaction is direct and occurs in association with the Elongin BC complex. Interacts with SPSB2 (via B30.2/SPRY domain); this interaction occurs in association with the Elongin BC complex. Interacts with SPSB4 (via B30.2/SPRY domain); this interaction occurs in association with the Elongin BC complex. Component of a ternary complex composed of SQSTM1 and PRKCZ. Interacts with actin (By similarity).

Similarity	The leucine-zipper domain is not essential for apoptosis, but is required for sensitization of cells to exogenous apoptotic insults and for interaction with its partners. The SAC domain is a death-inducing domain selective for apoptosis induction in cancer cells. This domain is essential for nuclear entry, Fas activation, inhibition of NF-kappa-B activity and induction of apoptosis in cancer cells (By similarity). The B30.2/SPRY domain-binding motif mediates recognition by proteins containing a B30.2/SPRY domain.
Subcellular 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.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



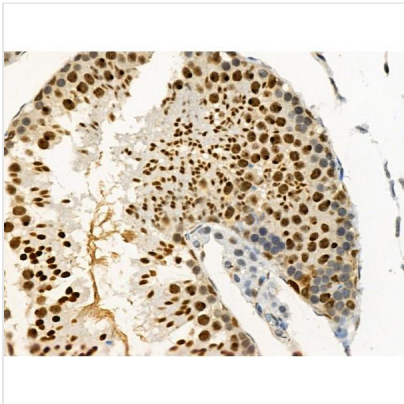
Application Data

At 25 degree C. Samples were then incubated with primary Ab(At 37 degree C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody. The nuclear counter stain is DAPI(blue).



IHC (Immunohistochemistry)

At 1/100 staining Rat testis tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



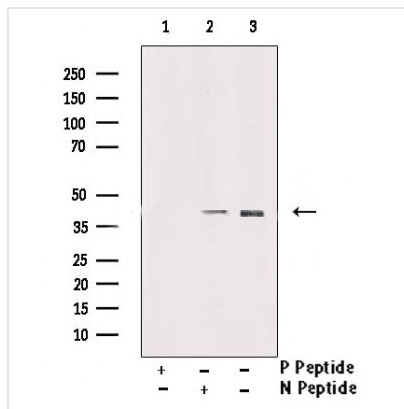
IHC (Immunohistochemistry)

At 1/100 staining Mouse testis tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



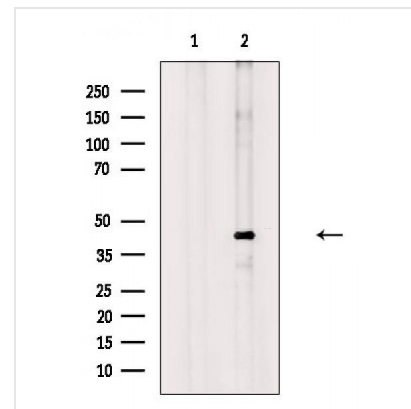
IHC (Immunohistochemistry)

At 1/100 staining Rat muscle tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of extracts from HeLa, using Phospho-PAR-4 (Thr163) Antibody. Lane1 was treated with phospho-blocking peptide, Lane2 was treated with non-phospho-blocking peptide.



WB (Western Blot)

Western blot analysis of extracts from PC12(UV treatment), using Phospho-PAR4 (Thr163) Antibody. The lane on the left was treated with blocking peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-PAR4 antibody

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. Seems also to be a transcriptional repressor by itself. May be directly involved in regulating the amyloid precursor protein (APP) cleavage activity of BACE1.

NCBI AND UNIPROT INFORMATION

NCBI GI #	55769533
NCBI GeneID	5074
NCBI Accession #	NP_002574.2
NCBI GenBank Nucleotide #	NM_002583.2
UniProt Accession #	Q96IZ0; O75796; Q6FHY9; Q8N700
Molecular Weight	36,568 Da
NCBI Official Full Name	PRKC apoptosis WT1 regulator protein
NCBI Official Synonym Full Names	PRKC, apoptosis, WT1, regulator
NCBI Official Symbol	PAWR
NCBI Official Synonym Symbols	PAR4; Par-4
NCBI Protein Information	PRKC apoptosis WT1 regulator protein; WT1-interacting protein; prostate apoptosis response-4; transcriptional repressor PAR4; prostate apoptosis response 4 protein; prostate apoptosis response protein 4; prostate apoptosis response protein PAR-4
UniProt Protein Name	PRKC apoptosis WT1 regulator protein
UniProt Gene Name	PAWR
UniProt Synonym Gene Names	PAR4; Par-4
UniProt Entry Name	PAWR_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

