Rabbit PRKAR1A Polyclonal Antibody | anti-PRKAR1A antibody

PRKAR1A Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA306543	**Rabbit**	**Human, Mouse, Rat**	**Immunofluorescence, Immunohistochemistry, Western Blot**

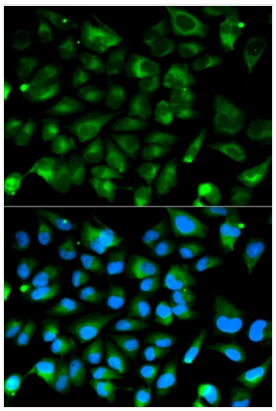
PRODUCT SYNONYMS

PRKAR1A; Polyclonal Antibody; PRKAR1A Antibody; CAR; CNC; CNC1; DKFZp779L0468; anti-PRKAR1A antibody

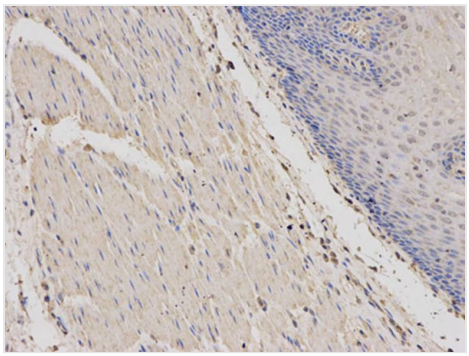
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Specificity	The antibody detects endogenous level of total PRKAR1A protein.
Purity/Purification	Antibodies were purified by affinity purification using immunogen.
Form/Format	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1.0 mg/ml (varies by lot)
Sequence Length	381
Applicable Applications for anti-PRKAR1A antibody	IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen Type	Recombinant Protein
Immunogen Description	Recombinant protein of human PRKAR1A.
Target Name	PRKAR1A
Preparation and Storage	Store at -20 degree C

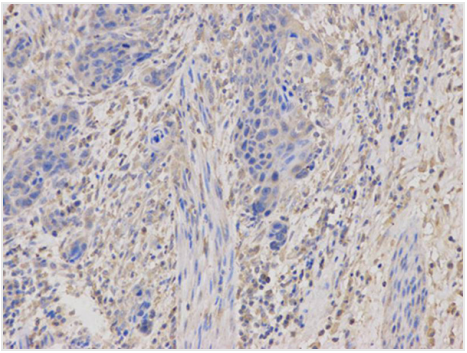
IMAGES



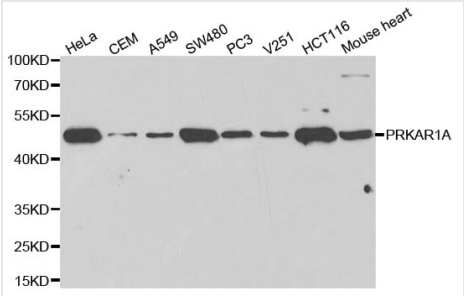
IF (Immunofluorescence)
Immunofluorescence analysis of HeLa cell using PRKAR1A antibody. Blue: DAPI for nuclear staining.



IHC (Immunohistochemisry)
Immunohistochemical analysis of paraffin-embedded human esophagus using PRKAR1A antibody at dilution of 1:100 (200x lens).



IHC (Immunohiostchemistry)
Immunohistochemical analysis of paraffin-embedded human esophageal cancer using PRKAR1A antibody at dilution of 1:100 (200x lens).



WB (Western Blot)
Western blot analysis of extracts of various cell lines using PRKAR1A antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-PRKAR1A antibody	The second messenger cyclic AMP (cAMP) activates cAMP-dependent protein kinase (PKA or cAPK) in mammalian cells and controls many cellular mechanisms such as gene transcription, ion transport, and protein phosphorylation (1). Inactive PKA is a heterotetramer composed of a regulatory subunit (R) dimer and a catalytic subunit (C) dimer. In this inactive state, the pseudosubstrate sequences on the R subunits block the active sites on the C subunits. Three C subunit isoforms (C-a, C-b, and C-g) and two families of regulatory subunits (RI and RII) with distinct cAMP binding properties have been identified. The two R families exist in two isoforms, a and b (RI-a, RI-b, RII-a, and RII-b). Upon binding of cAMP to the R subunits, the autoinhibitory contact is eased and active monomeric C subunits are released. PKA shares substrate specificity with Akt (PKB) and PKC, which are characterized by an arginine at position -3 relative to the phosphorylated serine or threonine residue (2). Substrates that present this consensus sequence and have been shown to be phosphorylated by PKA are Bad (Ser155), CREB (Ser133), and GSK-3 (GSK-3a Ser21 and GSK-3b Ser9) (3-5). In addition, combined knock-down of PKA C-a and -b blocks cAMP-mediated phosphorylation of Raf (Ser43 and Ser259) (6). Autophosphorylation and phosphorylation by PDK-1 are two known mechanisms responsible for phosphorylation of the C subunit at Thr197 (7).
Product Categories/Family for anti-PRKAR1A antibody	Total protein Ab

NCBI AND UNIPROT INFORMATION

NCBI GI #	443497964
NCBI GeneID	5573
NCBI Accession #	NP_001263218.1
NCBI GenBank Nucleotide #	NM_001276289.1
UniProt Accession #	P10644; Q567S7; K7ER48
Molecular Weight	38,003 Da
NCBI Official Full Name	cAMP-dependent protein kinase type I-alpha regulatory subunit isoform a
NCBI Official Synonym Full Names	protein kinase, cAMP-dependent, regulatory, type I, alpha
NCBI Official Symbol	PRKAR1A
NCBI Official Synonym Symbols	CAR; CNC; CNC1; PKR1; TSE1; ADOHR; PPNAD1; PRKAR1; ACRDYS1
NCBI Protein Information	cAMP-dependent protein kinase type I-alpha regulatory subunit
UniProt Protein Name	cAMP-dependent protein kinase type I-alpha regulatory subunit
UniProt Gene Name	**PRKAR1A**
UniProt Synonym Gene Names	PKR1; PRKAR1; TSE1; TSE1
UniProt Entry Name	KAP0_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.

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Online datasheet: https://stage.aaabiotech.com/polyclonal/prkar1a-antibody-immunofluorescence-immunohistochemistry-western-blot-elisa/306543