

Rabbit anti-Human Protein Kinase A regulatory subunit I alpha Polyclonal Antibody | anti-PRKAR1A antibody

Protein Kinase A regulatory subunit I alpha Antibody (N-term)

CATALOG # AAA287662	HOST Rabbit	REACTIVITY Human	APPLICATIONS Immunohistochemistry, ELISA, Western Blot
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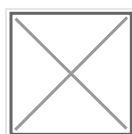
PRODUCT SYNONYMS

Protein Kinase A regulatory subunit I alpha; Polyclonal Antibody; Protein Kinase A regulatory subunit I alpha Antibody (N-term); cAMP-dependent protein kinase type I-alpha regulatory subunit; Tissue-specific extinguisher 1; TSE1; N-terminally processed; PRKAR1A; PKR1; PRKAR1; anti-PRKAR1A antibody

PRODUCT SPECIFICATIONS

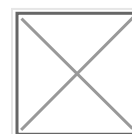
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This Protein Kinase A regulatory subunit I alpha antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human Protein Kinase A regulatory subunit I alpha.
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Concentration	Vial Concentration: 2 (varies by lot)
Sequence Positions	1-30
Sequence Length	337
Applicable Applications for anti-PRKAR1A antibody	IHC (Immunohistochemistry), ELISA, WB (Western Blot)
Antigen Type	Synthetic Peptide
Antigen Source	HUMAN
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



IHC (Immunohistochemistry)

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



WB (Western Blot)

Western blot analysis of PKR1 (arrow) using rabbit polyclonal hPKR1-M1. 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the PKR1 gene (Lane 2).(2ug/ml



WB (Western Blot)
Western blot analysis of anti-PKR1 Antibody (N-term) in CEM cell line lysates (35ug/lane).
PKR1 (arrow) was detected using the purified Pab.

ADDITIONAL INFORMATION

Related Product Information for anti-PRKAR1A antibody	cAMP is a signaling molecule important for a variety of cellular functions. cAMP exerts its effects by activating the cAMP-dependent protein kinase (AMPK), which transduces the signal through phosphorylation of different target proteins. The inactive holoenzyme of AMPK is a tetramer composed of two regulatory and two catalytic subunits. cAMP causes the dissociation of the inactive holoenzyme into a dimer of regulatory subunits bound to four cAMP and two free monomeric catalytic subunits. Four different regulatory subunits and three catalytic subunits of AMPK have been identified in humans. PKR1 is one of the regulatory subunits. This protein was found to be a tissue-specific extinguisher that down-regulates the expression of seven liver genes in hepatoma x fibroblast hybrids. Functional null mutations in the gene cause Carney complex (CNC), an autosomal dominant multiple neoplasia syndrome. The gene can fuse to the RET protooncogene by gene rearrangement and form the thyroid tumor-specific chimeric oncogene known as PTC2.
Product Categories/Family for anti-PRKAR1A antibody	Cancer; Metabolism; Signal Transduction
References	Gronholm, M., et al., J. Biol. Chem. 278(42):41167-41172 (2003). Bertherat, J., et al., Cancer Res. 63(17):5308-5319 (2003). Stergiopoulos, S.G., et al., FEBS Lett. 546(1):59-64 (2003). Robinson-White, A., et al., Hum. Mol. Genet. 12(13):1475-1484 (2003). Holm, A.M., et al., J. Immunol. 170(11):5772-5777 (2003).

NCBI AND UNIPROT INFORMATION

NCBI GI #	443497964
NCBI GeneID	5573
NCBI Accession #	NP_001263218.1; NP_001263219.1; NP_001265362.1; NP_002725.1; NP_997636.1; NP_997637.1
NCBI GenBank Nucleotide #	NM_001276289.1
UniProt Accession #	P10644; Q567S7; K7ER48
Molecular Weight	42982
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.

