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ARG59011
anti-PRKAR1A / PKA RI alpha antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PRKAR1A / PKA RI alpha
Tested Reactivity	Hu, Rat
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PRKAR1A / PKA RI alpha
Species	Human
Immunogen	Recombinant protein corresponding to E2-E81 of Human PRKAR1A.
Conjugation	Un-conjugated
Alternate Names	Tissue-specific extinguisher 1; ADOHR; CAR; PRKAR1; ACRDYS1; TSE1; cAMP-dependent protein kinase type I-alpha regulatory subunit; CNC; CNC1; PPNAD1; PKR1; PKA 1 alpha

Application Instructions

Application table

Application	Dilution
IHC-P	0.5 - 1 µg/ml
WB	0.1 - 0.5 µg/ml

Application Note

IHC-P: Antigen Retrieval: By heat mediation.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

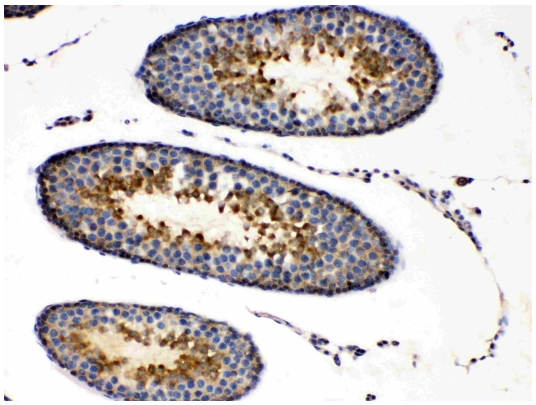
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na2HPO4, 0.9% NaCl, 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

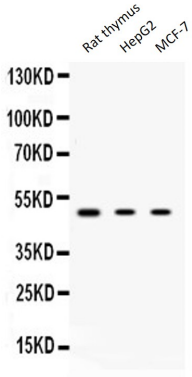
Gene Symbol	PRKAR1A
Gene Full Name	protein kinase, cAMP-dependent, regulatory, type I, alpha
Background	cAMP is a signaling molecule important for a variety of cellular functions. cAMP exerts its effects by activating the cAMP-dependent protein kinase, which transduces the signal through phosphorylation of different target proteins. The inactive kinase holoenzyme 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 have been identified in humans. This gene encodes 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. Mutations in this gene cause Carney complex (CNC). This gene can fuse to the RET protooncogene by gene rearrangement and form the thyroid tumor-specific chimeric oncogene known as PTC2. A nonconventional nuclear localization sequence (NLS) has been found for this protein which suggests a role in DNA replication via the protein serving as a nuclear transport protein for the second subunit of the Replication Factor C (RFC40). Several alternatively spliced transcript variants encoding two different isoforms have been observed. [provided by RefSeq, Jan 2013]
Function	Regulatory subunit of the cAMP-dependent protein kinases involved in cAMP signaling in cells. [UniProt]
Calculated Mw	43 kDa
PTM	The pseudophosphorylation site binds to the substrate-binding region of the catalytic chain, resulting in the inhibition of its activity. [UniProt]
Cellular Localization	Cell membrane. [UniProt]

Images



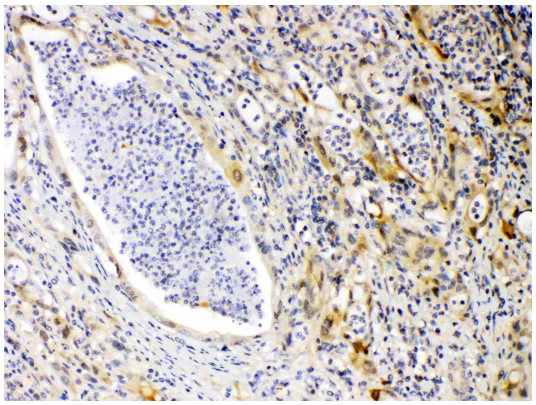
ARG59011 anti-PRKAR1A / PKA RI alpha antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat testis tissue stained with ARG59011 anti-PRKAR1A / PKA RI alpha antibody at 1 µg/ml dilution.



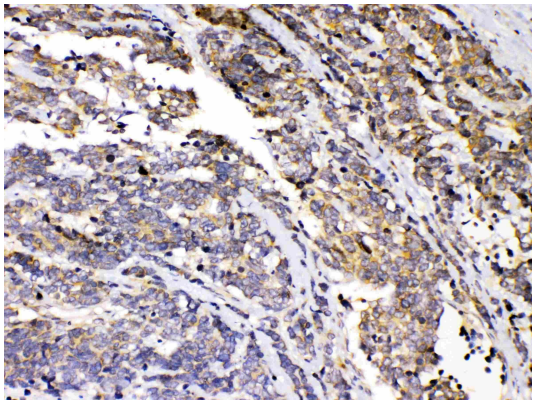
ARG59011 anti-PRKAR1A / PKA RI alpha antibody WB image

Western blot: Rat thymus, HepG2 and MCF7 lysates stained with ARG59011 anti-PRKAR1A / PKA RI alpha antibody at 0.5 µg/ml dilution.



ARG59011 anti-PRKAR1A / PKA RI alpha antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human intestinal cancer tissue stained with ARG59011 anti-PRKAR1A / PKA RI alpha antibody at 1 µg/ml dilution.



ARG59011 anti-PRKAR1A / PKA RI alpha antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human lung cancer tissue stained with ARG59011 anti-PRKAR1A / PKA RI alpha antibody at 1 µg/ml dilution.