

PKA I Alpha reg Polyclonal Antibody

Description

Product type	Primary Antibody
Code	BT-AP07201
Host	Rabbit
Isotype	IgG
Size	20ul, 50ul, 100ul
Immunogen	The antiserum was produced against synthesized peptide derived from human KAP0. AA range:271-320
Mol wt	42982
Species reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Recommended application	WB, IHC-p, IF, ELISA
Concentration	1 mg/ml
Full name	PKA Ialpha reg Antibody
Synonyms	PRKAR1A; PKR1; PRKAR1; TSE1; cAMP-dependent protein kinase type I-alpha regulatory subunit; Tissue-specific extinguisher 1; TSE1

This product is for research use only, not for use in human, therapeutic or diagnostic procedure.

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. PRKAR1A encodes one of the regulatory subunits. Protein kinase cAMP-dependent type I regulatory subunit alpha was found to be a tissue-specific extinguisher that down-regulates the expression of seven liver genes in hepatoma x fibroblast hybrids. Mutations in PRKAR1A cause Carney complex (CNC). PRKAR1A 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 protein kinase cAMP-dependent type I regulatory subunit alpha 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.

Recommended Dilution

WB: 1: 500 - 1: 2000

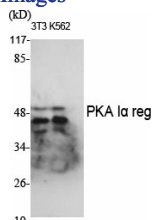
IHC: 1: 100 - 1: 300

IF: 1: 200 - 1: 1000

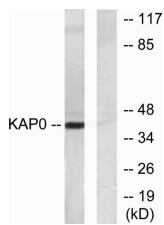
ELISA: 1: 20000

Not yet tested in other applications.

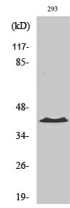
Images



Western Blot analysis of various cells using PKA Iα reg Polyclonal Antibody



Western blot analysis of lysates from HepG2 cells, using KAP0 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of 293 cells using PKA Iα reg Polyclonal Antibody

Storage

-20°C for one year

501 Changsheng S Rd, Nanhu Dist, Jiaxing, Zhejiang, China

Tel: 86 21 31007137 | E-mail: save@bt-laboratory.com | www.bt-laboratory.com