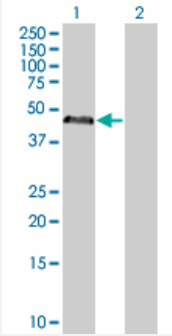
PRKAR1A 293T Cell Transient Overexpression Lysate(Denatured)

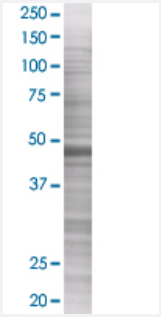
Catalog # H00005573-T01 Size 100 uL

Applications



Western Blot

Lane 1: PRKAR1A transfected lysate (43 KDa)
Lane 2: Non-transfected lysate.



SDS-PAGE Gel

PRKAR1A transfected lysate.

Specification

Transfected Cell Line	293T
Plasmid	pCMV-PRKAR1A full-length
Host	Human
Theoretical MW (kDa)	42.02
Quality Control Testing	Transient overexpression cell lysate was tested with Anti-PRKAR1A antibody (H00005573-B01) by Western Blots. Western Blot Lane 1: PRKAR1A transfected lysate (43 KDa) Lane 2: Non-transfected lysate. SDS-PAGE Gel PRKAR1A transfected lysate.

Storage Buffer	1X Sample Buffer (50 mM Tris-HCl, 2% SDS, 10% glycerol, 300 mM 2-mercaptoethanol, 0.01% Bromophenol blue)
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot

Gene Info — PRKAR1A

Entrez GeneID	5573
GeneBank Accession#	NM_002734
Protein Accession#	NP_002725
Gene Name	PRKAR1A
Gene Alias	CAR, CNC, CNC1, DKFZp779L0468, MGC17251, PKR1, PPNAD1, PRKAR1, TSE1
Gene Description	protein kinase, cAMP-dependent, regulatory, type I, alpha (tissue specific extinguisher 1)
Omim ID	160980 188550 188830 255960 610489
Gene Ontology	Hyperlink
Gene Summary	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 PTC 2. 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). Three alternatively spliced transcript variants encoding the same protein have been observed. [provided by RefSeq
Other Designations	cAMP-dependent protein kinase regulatory subunit RIalpha|cAMP-dependent protein kinase type I-alpha regulatory chain|cAMP-dependent protein kinase, regulatory subunit alpha 1|protein kinase A type 1a regulatory subunit|tissue-specific extinguisher 1

Pathway

- Apoptosis
- Insulin signaling pathway

Disease

- Adenoma
- Adrenal Cortex Diseases
- Adrenal Cortex Neoplasms
- Cushing Syndrome
- Genetic Predisposition to Disease
- Myxoma
- Thyroid Neoplasms