

## PRKAR1A Knockout cell line (HeLa)

Catalog Number: KO05025

Product Information	
Product Name	PRKAR1A Knockout cell line (HeLa)
specification	1*10^6
Storage and transportation	Dry ice preservation/T25 live cell transportation.
Cell morphology	Epithelioid, adherent cell
Passage ratio	1:3~1:6
species	Human
Gene	PRKAR1A
Gene ID	5573
Build method	Electric rotation method / virus method
Mycoplasma testing	Negative
Cultivation system	90%DMEM+10% FBS
Parental Cell Line	HeLa
Quality Control	Genotype: PRKAR1A Knockout cell line (HeLa) >95% viability before freezing. All cells were tested and found to be free of bacterial, viruses,mycoplasma and other toxins.

Gene Information	
Gene Official Full Name	protein kinase cAMP-dependent type I regulatory subunit alphaprovided by HGNC
Also known as	CAR; CNC; CNC1; PKR1; TSE1; ADOHR; PPNAD1; PRKAR1; ACRDYS1; Prkar1alpha
Gene Description	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]
Expression	Ubiquitous expression in heart (RPKM 107.2), thyroid (RPKM 76.1) and 25 other tissues See more