



Anti-PRKAR2A polyclonal antibody (DPAB-DC2435)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen 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. The protein encoded by this gene is one of the regulatory subunits. This subunit can be phosphorylated by the activated catalytic subunit. It may interact with various A-kinase anchoring proteins and determine the subcellular localization of cAMP-dependent protein kinase. This subunit has been shown to regulate protein transport from endosomes to the Golgi apparatus and further to the endoplasmic reticulum (ER).

Specificity	PRKAR2A polyclonal antibody detects endogenous levels of PRKAR2A protein.
Immunogen	A synthetic peptide corresponding to PRKAR2A.
Source/Host	Rat
Species Reactivity	Human
Purification	Antigen affinity purification
Conjugate	Unconjugated
Applications	WB (Cell lysate), IHC, IF,
Format	Liquid
Concentration	1 mg/mL

Size	100 µl
Buffer	In PBS, pH 7.2 (0.05% sodium azide)
Preservative	0.05% Sodium Azide
Storage	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name	PRKAR2A protein kinase, cAMP-dependent, regulatory, type II, alpha [Homo sapiens (human)]
Official Symbol	PRKAR2A
Synonyms	PRKAR2A; protein kinase, cAMP-dependent, regulatory, type II, alpha; PKR2; PRKAR2; cAMP-dependent protein kinase type II-alpha regulatory subunit; protein kinase A, RII-alpha subunit; cAMP-dependent protein kinase regulatory subunit RII alpha;
Entrez Gene ID	5576
Protein Refseq	NP_004148
UniProt ID	A0A024R2W3
Chromosome Location	3p21.3-p21.2
Pathway	Apoptosis; Ca-dependent events; Calcium Regulation in the Cardiac Cell; DAG and IP3 signaling
Function	cAMP binding; cAMP-dependent protein kinase inhibitor activity; cAMP-dependent protein kinase regulator activity; protein binding