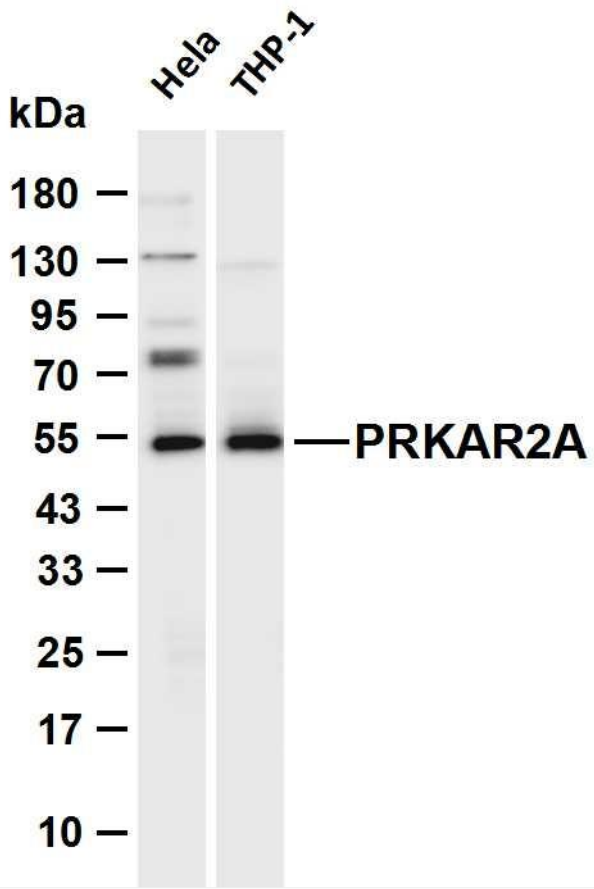
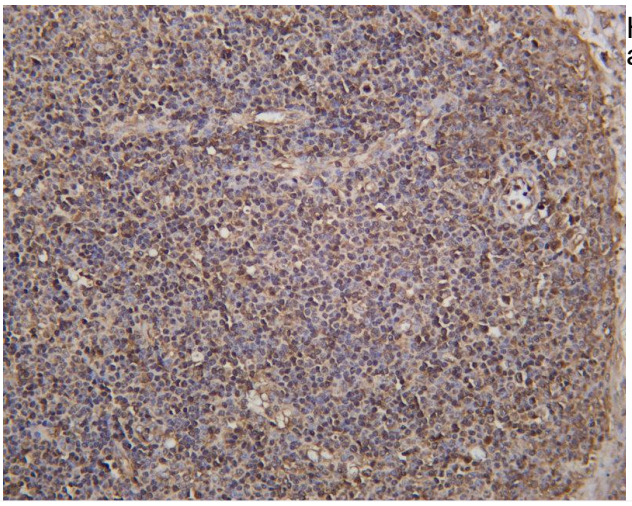
PRKAR2A Rabbit mAb

Catalog No	YP-rAb-17337
Isotype	IgG
Reactivity	Human
Applications	WB,IHC,IF,IP,ELISA
Gene Name	PRKAR2A
Protein Name	cAMP-dependent protein kinase type II-alpha regulatory subunit
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:1000-1:2000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	PRKAR2A ; PKR2 ; PRKAR2 ; cAMP-dependent protein kinase type II-alpha regulatory subunit
Observed Band	54kD
Calculated Molecular Weight	46kD
Cell Pathway	Cytoplasm . Cell membrane . Colocalizes with PJA2 in the cytoplasm and the cell membrane.
Tissue Specificity	Four types of regulatory chains are found: I-alpha, I-beta, II-alpha, and II-beta. Their expression varies among tissues and is in some cases constitutive and in others inducible.
Function	Type II regulatory chains mediate membrane association by binding to anchoring proteins, including the MAP2 kinase.,PTM:Phosphorylated by the activated catalytic chain.,similarity:Belongs to the cAMP-dependent kinase regulatory chain family.,similarity:Contains 2 cyclic nucleotide-binding domains.,subunit:The inactive form of the enzyme is composed of two regulatory chains and two catalytic chains. Activation by cAMP produces two active catalytic monomers and a regulatory dimer that binds four cAMP molecules. Interacts with AKAP4 and CBFA2T3.,tissue specificity:Four types of regulatory chains are found: I-alpha, I-beta, II-alpha, and II-beta. Their expression varies among tissues and is in some cases constitutive and in others inducible.,

Background	protein kinase cAMP-dependent type II regulatory subunit alpha(PRKAR2A) Homo sapiens 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 b
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-PRKAR2A antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: Hela Lane 2: THP-1 Predicted band size: 46kDa Observed band size: 54kDa



Human tonsil was stained with anti-PRKAR2A Rabbit antibody