G-Biosciences Image not found or type unknown

Immunotag™ PKAα/β/γ cat Polyclonal Antibody

Antibody Specification

Catalog No.	ITT3749
Product Description	Immunotag™ PKAα/β/γ cat Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	PKAα/β/γ cat
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,IF,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized peptide derived from PKAα/β/γ cat, at AA range: 140-220
Specificity	PKAα/β/γ cat Polyclonal Antibody detects endogenous levels of PKAα/β/γ cat protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	PRKACA/PRKACB
Accession No.	P17612/P22694/P22612 P27791/P68182
Alternate Names	PRKACA; PKACA; cAMP-dependent protein kinase catalytic subunit alpha; PKA C-alpha; PRKACB; cAMP-dependent protein kinase catalytic subunit beta; PKA C-beta; PRKACG; cAMP-dependent protein kinase catalytic subunit gamma; PKA C-gamma

Antibody Specification

Description	protein kinase cAMP-activated catalytic subunit alpha(PRKACA) Homo sapiens This gene encodes one of the catalytic subunits of protein kinase A, which exists as a tetrameric holoenzyme with two regulatory subunits and two catalytic subunits, in its inactive form. 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. cAMP-dependent phosphorylation of proteins by protein kinase A is important to many cellular processes, including differentiation, proliferation, and apoptosis. Constitutive activation of this gene caused either by somatic mutations, or genomic duplications of regions that include this gene, have been associated with hyperplasias and adenomas of the adrenal cortex and are linked to corticotropin-independent Cushing's syndrome. Altern
Cell Pathway/ Category	MAPK_ERK_Growth,MAPK_G_Protein,Calcium,Chemokine,Oocyte meiosis,Apoptosis_Inhibition,Apoptosis_Mitochondrial,Apoptosis_Overview,Vascular smooth muscle contraction,WNT,WNT-T CELLHedgehog,Gap junction,Long-term potentiation,Olfactory transduction,Taste transduction,Insulin_Receptor,GnRH,Progesterone-mediated oocyte maturation,Melanogenesis,Prion diseases,Vibrio cholerae infection,Dilated cardiomyopathy,
Protein Expression	Amnion,Epithelium,Eye,Sperm,Testis,Thalamus,
Subcellular Localization	acrosomal vesicle,nucleus,nucleoplasm,mitochondrion,centrosome,cytosol,plasma membrane,cAMP-dependent protein kinase complex,membrane,nuclear speck,motile cilium,nucleotide-activated protein kinas
Protein Function	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,enzyme regulation:Activated by cAMP.,function:Phosphorylates a large number of substrates in the cytoplasm and the nucleus.,PTM:Asn-3 is partially deaminated to Asp giving rise to 2 major isoelectric variants, called CB and CA respectively.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. cAMP subfamily.,similarity:Contains 1 AGC-kinase C-terminal domain.,similarity:Contains 1 protein kinase domain.,subcellular location:Translocates into the nucleus (monomeric catalytic subunit) (By similarity). The inactive holoenzyme is found in the cytoplasm.,subunit:A number of inactive tetrameric holoenzymes are produced by the combination of homo- or heterodimers of the different regulatory subunits associated with 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.,tissue specificity:Isoform 2 is sperm specific.,
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