

## Product datasheet for **CF502750**

### **PRKAR1B Mouse Monoclonal Antibody [Clone ID: OTI2A3]**

#### **Product data:**

<b>Product Type:</b>	Primary Antibodies
<b>Clone Name:</b>	OTI2A3
<b>Applications:</b>	FC, IF, IHC, WB
<b>Recommended Dilution:</b>	WB 1:2000, IHC 1:150, IF 1:100, FLOW 1:100
<b>Reactivity:</b>	Human, Mouse, Rat
<b>Host:</b>	Mouse
<b>Isotype:</b>	IgG1
<b>Clonality:</b>	Monoclonal
<b>Immunogen:</b>	Full length human recombinant protein of human PRKAR1B (NP_002726) produced in HEK293T cell.
<b>Formulation:</b>	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
<b>Reconstitution Method:</b>	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
<b>Purification:</b>	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store at -20°C as received.
<b>Stability:</b>	Stable for 12 months from date of receipt.
<b>Predicted Protein Size:</b>	42.9 kDa
<b>Gene Name:</b>	protein kinase cAMP-dependent type I regulatory subunit beta
<b>Database Link:</b>	<a href="#">NP_002726</a> <a href="#">Entrez Gene 19085 Mouse</a> <a href="#">Entrez Gene 25521 Rat</a> <a href="#">Entrez Gene 5575 Human</a> <a href="#">P31321</a>



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**Background:**

Cyclic AMP-dependent protein kinase A (PKA) is an essential enzyme in the signaling pathway of the second messenger cAMP. Through phosphorylation of target proteins, PKA controls many biochemical events in the cell including regulation of metabolism, ion transport, and gene transcription. The PKA holoenzyme is composed of 2 regulatory and 2 catalytic subunits and dissociates from the regulatory subunits upon binding of cAMP. [supplied by OMIM, Jun 2009]

**Synonyms:**

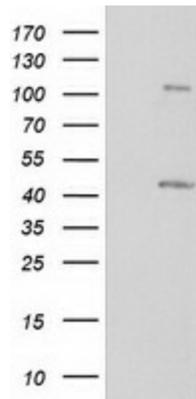
PRKAR1

**Protein Families:**

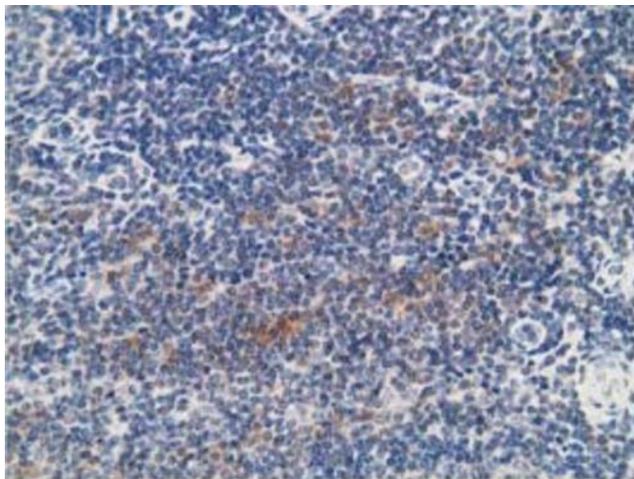
Druggable Genome

**Protein Pathways:**

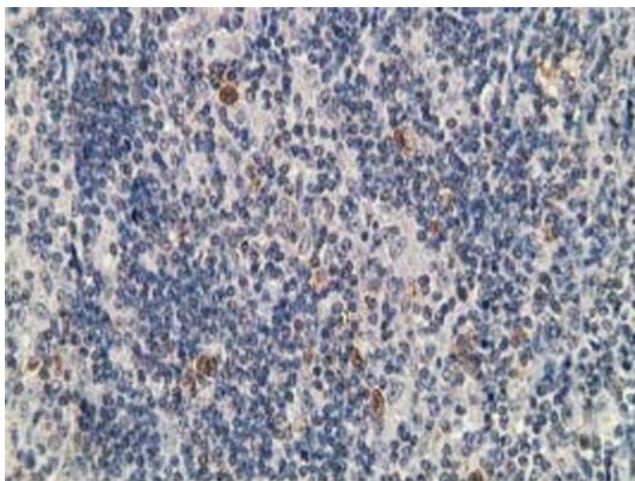
Apoptosis, Insulin signaling pathway

**Product images:**

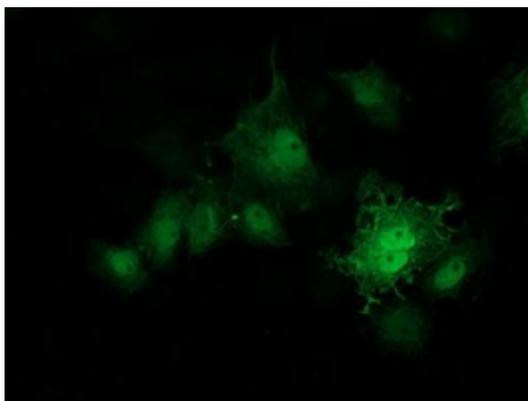
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PRKAR1B (Cat# [RC207809], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PRKAR1B (Cat# [TA502750]). Positive lysates [LY400964] (100ug) and [LC400964] (20ug) can be purchased separately from OriGene.



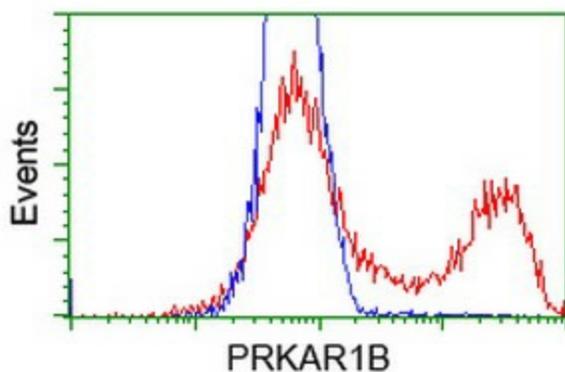
Immunohistochemical staining of paraffin-embedded Human lymph node tissue within the normal limits using anti-PRKAR1B mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA502750])



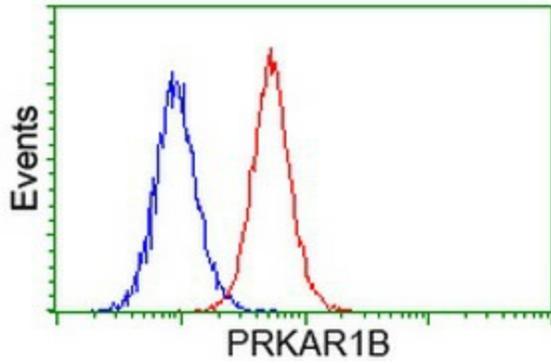
Immunohistochemical staining of paraffin-embedded Human lymphoma tissue using anti-PRKAR1B mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA502750])



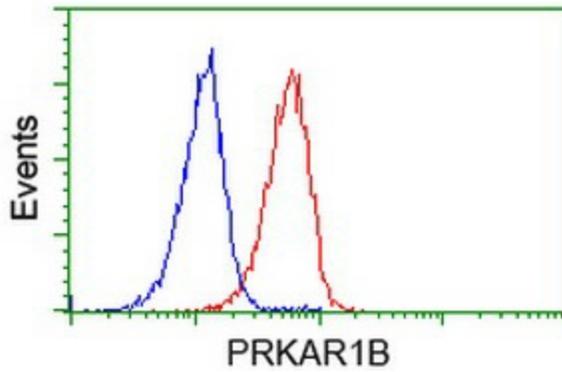
Anti-PRKAR1B mouse monoclonal antibody ([TA502750]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PRKAR1B ([RC207809]).



HEK293T cells transfected with either [RC207809] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-PRKAR1B antibody ([TA502750]), and then analyzed by flow cytometry.



Flow cytometric Analysis of HeLa cells, using anti-PRKAR1B antibody ([TA502750]), (Red), compared to a nonspecific negative control antibody, (Blue).



Flow cytometric Analysis of Jurkat cells, using anti-PRKAR1B antibody ([TA502750]), (Red), compared to a nonspecific negative control antibody, (Blue).