

## PRKCA Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant PRKCA.

Catalog # AT3431a

### Specification

#### PRKCA Antibody (monoclonal) (M01) - Product Information

|                   |                           |
|-------------------|---------------------------|
| Application       | IF, WB, IHC, E            |
| Primary Accession | <a href="#">P17252</a>    |
| Other Accession   | <a href="#">NM_002737</a> |
| Reactivity        | Human                     |
| Host              | mouse                     |
| Clonality         | Monoclonal                |
| Isotype           | IgG1 Kappa                |
| Calculated MW     | 76750                     |

#### PRKCA Antibody (monoclonal) (M01) - Additional Information

Gene ID 5578

#### Other Names

Protein kinase C alpha type, PKC-A,  
PKC-alpha, PRKCA, PKCA, PRKACA

#### Target/Specificity

PRKCA (NP\_002728, 563 a.a. ~ 672 a.a)  
partial recombinant protein with GST tag.  
MW of the GST tag alone is 26 KDa.

#### Dilution

WB~~1:500~1000

#### Format

Clear, colorless solution in phosphate  
buffered saline, pH 7.2 .

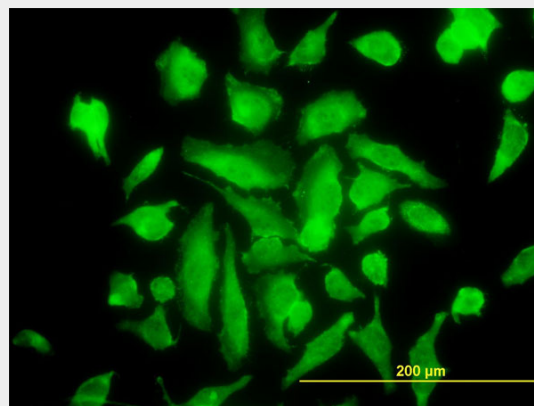
#### Storage

Store at -20°C or lower. Aliquot to avoid  
repeated freezing and thawing.

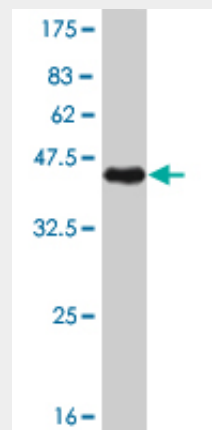
#### Precautions

PRKCA Antibody (monoclonal) (M01) is for  
research use only and not for use in  
diagnostic or therapeutic procedures.

#### PRKCA Antibody (monoclonal) (M01) - Protocols



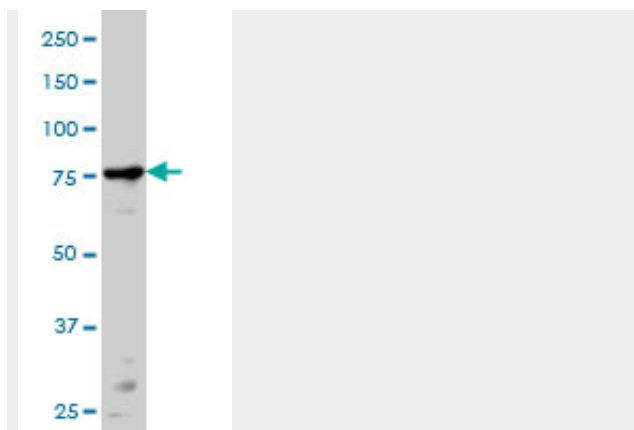
Immunofluorescence of monoclonal antibody to PRKCA on HeLa cell. [antibody concentration 10 ug/ml]



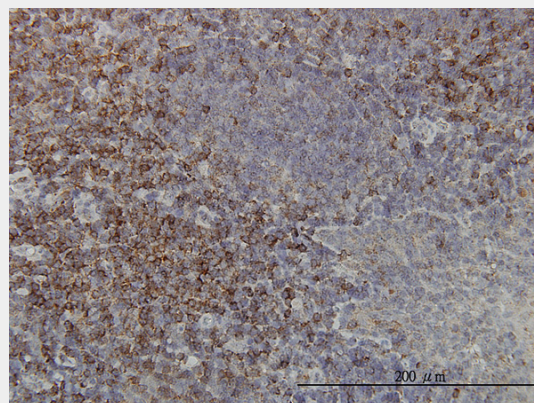
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (37.84 KDa) .

Provided below are standard protocols that you may find useful for product applications.

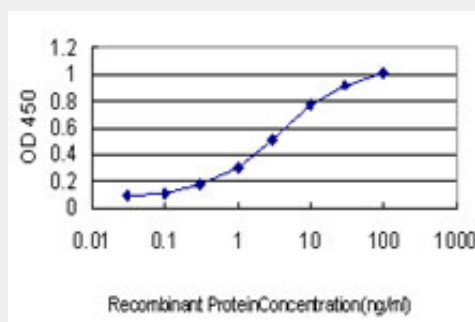
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)



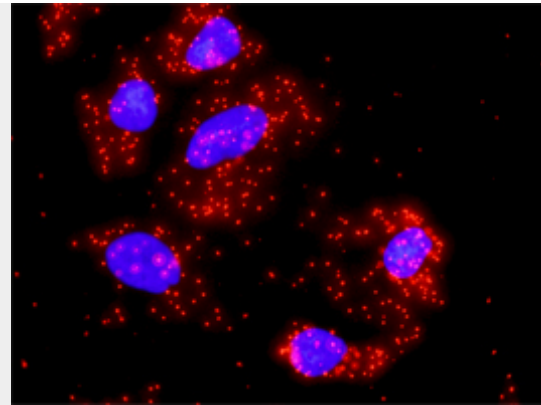
PRKCA monoclonal antibody (M01), clone 2F11 Western Blot analysis of PRKCA expression in HeLa (Cat # AT3431a)



Immunoperoxidase of monoclonal antibody to PRKCA on formalin-fixed paraffin-embedded human tonsil. [antibody concentration 1 ug/ml]



Detection limit for recombinant GST tagged PRKCA is approximately 0.1ng/ml as a capture antibody.



Proximity Ligation Analysis of protein-protein interactions between FAS and PRKCA HeLa cells were stained with anti-FAS rabbit purified polyclonal 1:1200 and anti-PRKCA mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

#### **PRKCA Antibody (monoclonal) (M01) - Background**

Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and the second messenger diacylglycerol. PKC family members phosphorylate a wide variety of protein targets and are known to be involved in diverse cellular signaling pathways. PKC family members also serve as major receptors for phorbol esters, a class of tumor promoters. Each member of the PKC family has a specific expression profile and is believed to play a distinct role in cells. The protein encoded by this gene is one of the PKC family members. This kinase has been reported to play roles in many different cellular processes, such as cell adhesion, cell transformation, cell cycle checkpoint, and cell volume control. Knockout studies in mice suggest that this kinase may be a fundamental regulator of cardiac contractility and  $\text{Ca}^{2+}$  handling in myocytes.

#### **PRKCA Antibody (monoclonal) (M01) - References**

Analyses of shared genetic factors between asthma and obesity in children. Mel?n E, et al. J Allergy Clin Immunol, 2010 Sep. PMID 20816195.[The clinical significance of expression of ERCC1 and PkCalpha in

non-small cell lung cancer] He L, et al. Zhongguo Fei Ai Za Zhi, 2010 Mar. PMID 20673527. Erk1/2-dependent phosphorylation of PKCalpha at threonine 638 in hippocampal 5-HT(1A) receptor-mediated signaling. Debata PR, et al. Biochem Biophys Res Commun, 2010 Jul 2. PMID 20513439. A Large-scale genetic association study of esophageal adenocarcinoma risk. Liu CY, et al. Carcinogenesis, 2010 Jul. PMID 20453000. PKCalpha mediated induction of miR-101 in human hepatoma HepG2 cells. Chiang CW, et al. J Biomed Sci, 2010 May 6. PMID 20444294.