

## Product datasheet for TA336677

### PKC alpha (PRKCA) Mouse Monoclonal Antibody [Clone ID: MC5]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	MC5
Applications:	IF, IHC
Recommend Dilution:	WB: 1:1000, ELISA: 1:100-1:2000, FC: 1:10-1:1000, IF: 1:100-1:500, IHC: 1:200-1:500, IHC-F: 1:200-1:500, IHC-P: 1:200-1:500, IP: 1:10-1:100
Reactivity:	Bovine, Canine, Fish, Human, Mouse, Porcine, Rat
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Purified bovine brain Protein Kinase C
Formulation:	PBS containing 0.05% BSA, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Concentration:	1 mg/ml
Purification:	Protein A purified
Gene Name:	protein kinase C alpha
Database Link:	<a href="#">NP_002728 Entrez Gene 18750 Mouse</a> <a href="#">Entrez Gene 24680 Rat</a> <a href="#">Entrez Gene 5578 Human</a>
Background:	Protein Kinase C (PKC) refers to a family of serine/threonine protein kinases grouped by their activation mechanisms. PKC alpha belongs to the conventional PKC group, alongside Beta-I, Beta-II, and Gamma, and is activated by phosphatidylserine in a calcium dependent manner. Furthermore, PKC alpha is localized to the membrane and cytoplasm, but in some cases can translocate to the nucleus. PKC alpha helps to positively and negatively regulate cell proliferation, apoptosis, differentiation, adhesion, and migration via phosphorylation of RAF1, BCL2, CSPG4, TNNT2/CTNT, or MAPK1/3. It also exhibits positive interactions with ADAP1/CENTA1, CSPG4 and PRKCABP. PKC alpha demonstrates anti-apoptotic function in glioma cells and protects them from apoptosis by suppressing the p53/TP53-mediated activation of IGFBP3 (PMCID: PMC1360842). Additional research has shown PKC alpha's involvement in cellular inflammation (PMCID: PMC3080812).
Synonyms:	AAG6; PKC-alpha; PKCA; PRKACA



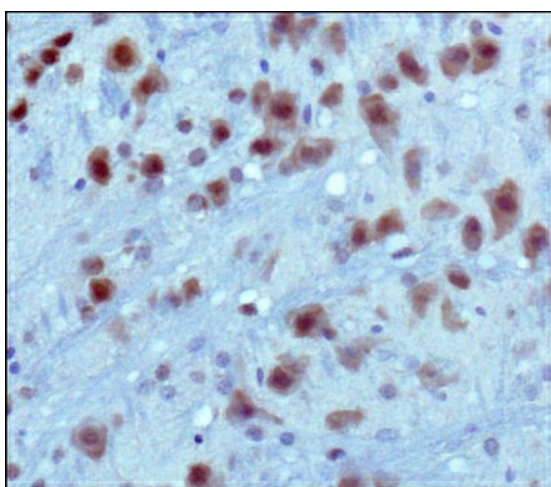
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**Note:** This PKC alpha Antibody (MC5) is useful for Western blot, ELISA, Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunohistochemistry on frozen and paraffin-embedded sections, Immunoprecipitation and Radioimmunoassay. In WB a band can be seen at ~75 kDa representing PKC alpha.

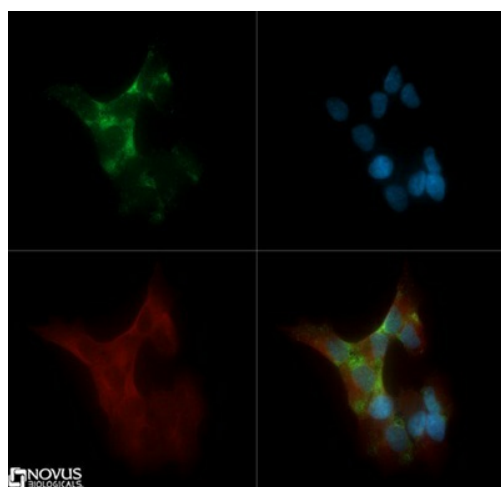
**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase

**Protein Pathways:** Calcium signaling pathway, ErbB signaling pathway, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, Gap junction, Glioma, GnRH signaling pathway, Leukocyte transendothelial migration, Long-term depression, Long-term potentiation, MAPK signaling pathway, Melanogenesis, Natural killer cell mediated cytotoxicity, Non-small cell lung cancer, Pathogenic Escherichia coli infection, Pathways in cancer, Phosphatidylinositol signaling system, Tight junction, Vascular smooth muscle contraction, VEGF signaling pathway, Vibrio cholerae infection, Wnt signaling pathway

### Product images:



Immunohistochemistry-Paraffin: PKC alpha Antibody (MC5) TA336677 - IHC staining of PKC alpha in mouse brain using DAB with hematoxylin counterstain.



Immunocytochemistry/Immunofluorescence: PKC alpha Antibody (MC5) TA336677 - PKC alpha antibody was tested in SH-SY5Y cells with Dylight 488 (green). Nuclei and beta-tubulin were counterstained with DAPI (blue) and Dylight 550 (red).