

Product datasheet for **AM03041PU-N**

PRKACA Mouse Monoclonal Antibody [Clone ID: 6D2.1]

Product data:

Product Type:	Primary Antibodies
Clone Name:	6D2.1
Applications:	WB
Recommended Dilution:	Suitable for Western Blotting (0.5-1 µg/ml). Positive control: HeLa human cervix carcinoma cell line Note: To detect PKAc gamma, use a more concentrated lysate from a tissue expressing this subunit (testis).
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Peptide corresponding to amino acids ESPAQNTAHLDQFERIK of human proteinkinase A c alpha (PKAc alpha).
Specificity:	This antibody strongly reacts with human proteinkinase A catalytic (PKAc) alpha subunit, and weakly with PKAc gamma subunit (both around 40 kDa). The recognized epitope of PKAc alpha is identical between man, sheep, pig, ox and dog.
Formulation:	PBS, pH 7.4 with 15 mM sodium azide as preservative. State: Aff - Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE).
Concentration:	lot specific
Purification:	Protein A affinity chromatography.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid freeze/thaw cycles.
Stability:	Shelf life: One year from despatch.
Gene Name:	protein kinase cAMP-activated catalytic subunit alpha
Database Link:	Entrez Gene 5566 Human P17612



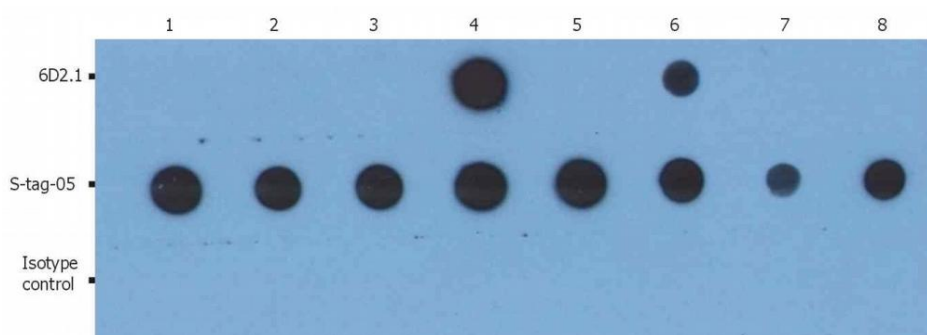
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Background:

Protein kinase A (PKA, cAMP-dependent protein kinase) is a key element of a ubiquitous signaling pathway important in the cell cycle, cellular communication, memory formation and behavior. PKA is composed of two catalytic (PKAc; Protein Kinase A catalytic subunit) and two regulatory subunits (PKAr). Upon binding cAMP, the complex dissociates to PKAr dimer and two activated PKAc ser/thr protein kinase catalytic monomers. The released PKAc can translocate into the nucleus and exert a regulatory role in the activation of multiple nuclear hormone receptors. However, PKAc-mediated activation of tonicity-dependent gene expression is cAMP independent. Humans express three types of PKAc subunit - PKAc alpha is present in most human tissues, PKAc beta and gamma are tissue-specific, the later is found in testes.

Synonyms:

PKA C-alpha

Product images:

Dot Blot analysis of GST and GST-fusion proteins using anti-PKAc (6D2.1) and anti-GST. The total amount of material spotted on the nitrocellulose membrane is 5 ng/spot. Lane 1: GST-Akt1 Lane 2: GST-Akt2 Lane 3: GST-Akt3 Lane 4: GST-PKAc alpha Lane 5: GST-PKAc beta Lane 6: GST-PKAc gamma Lane 7: GST-MEK 1 Lane 8: GST