

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human PKA RII α in direct ELISAs. Detects human and mouse PKA RII α in Western blots.
Source	Recombinant Monoclonal Rabbit IgG Clone # 2394D
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Synthetic peptide containing Human/Mouse PKA RII α Accession # P13861
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μ m filtered solution in PBS.

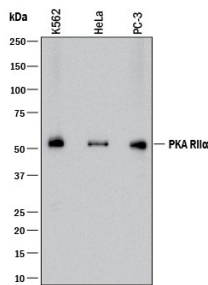
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.5 μ g/mL	See Below
Immunocytochemistry	8-25 μ g/mL	See Below
Immunohistochemistry	0.3-25 μ g/mL	Immersion fixed paraffin-embedded sections of human pancreatic cancer tissue

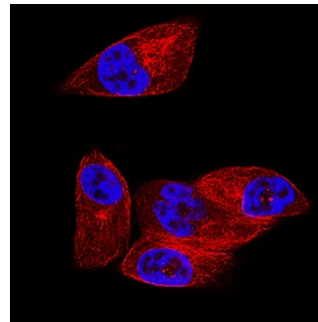
DATA

Western Blot



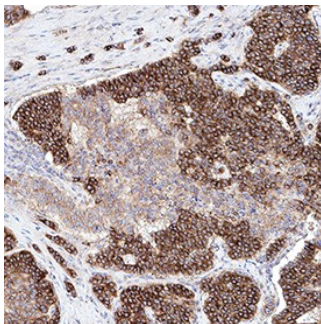
Detection of Human PKA RII α by Western Blot. Western blot shows lysates of K562 human chronic myelogenous leukemia cell line, HeLa human cervical epithelial carcinoma cell line, and PC-3 human prostate cancer cell line. PVDF membrane was probed with 0.5 μ g/mL of Rabbit Anti-Human/Mouse PKA RII α Monoclonal Antibody (Catalog # MAB8000) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for PKA RII α at approximately 50 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



PKA RII α in MDA-MB-231 Human Cell Line. PKA RII α was detected in immersion fixed MDA-MB-231 human breast cancer cell line using Rabbit Anti-Human/Mouse PKA RII α Monoclonal Antibody (Catalog # MAB8000) at 8 μ g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunocytochemistry



PKA RII α in Human Pancreatic Cancer Tissue. PKA RII α was detected in immersion fixed paraffin-embedded sections of human pancreatic cancer tissue using Rabbit Anti-Human/Mouse PKA RII α Monoclonal Antibody (Catalog # MAB8000) at 0.3 μ g/mL for 1 hour at room temperature followed by incubation with the Anti-Rabbit IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC003). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in cancer cells. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

PRKAR2 is a regulatory subunit of the cAMP-dependent protein kinases involved in cAMP signaling in cells. Four types of regulatory chains are found and their expression varies among tissues. In some cases expression is constitutive and in other cases it is inducible. PRKAR2 seems to be involved in both endosome-to-Golgi and Golgi-to-ER transport.