

Product datasheet for **AP14907PU-N**

CGK2 (PRKG2) (C-term) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	ELISA: 1/1,000. Immunohistochemistry: 1/50 - 1/100. Western Blot: 1/100 - 1/500.
Reactivity:	Human
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	This antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide selected from the C-terminal region of human cGKII.
Specificity:	This antibody reacts to cGKII.
Formulation:	PBS with 0.09% (W/V) sodium azide State: Purified State: Liquid purified Ig
Concentration:	lot specific
Purification:	Protein G column, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	protein kinase, cGMP-dependent, type II
Database Link:	Entrez Gene 5593 Human Q13237



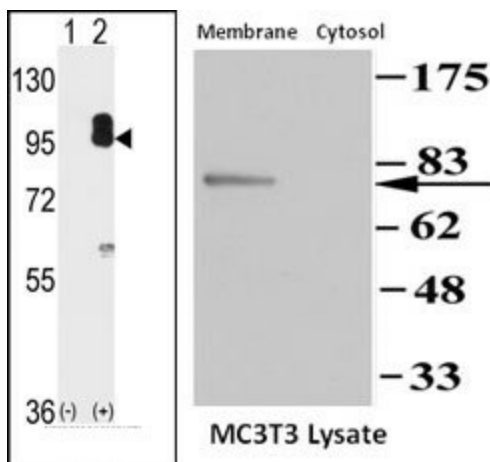
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Background:

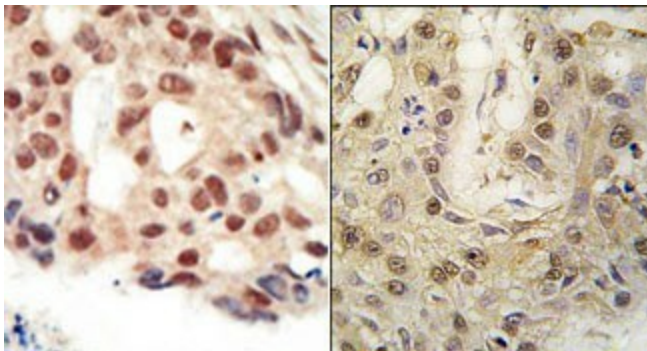
cGKII is thought to play a key role in a diverse set of physiological pathway. cGKII may mediate intestinal secretion of water and electrolytes induced by the E. coli toxin STa and the intestinal peptide guanylin. Edentification of the pathway that mediates intestinal fluid secretion by E. coli STa has potential medical implications because STa causes traveler's diarrhea and about 50% of infant mortality in developing countries. Transfection experiments in human cells disclose that cGKII phosphorylates SOX9 and attenuates SOX9 function by inhibiting its nuclear entry. Impaired differentiation of cultured KMI chondrocytes can be restored by silencing Sox9 by RNA interference. cGKII is postulated to be a molecular switch that couples the cessation of proliferation and the start of hypertrophic chondrocyte differentiation through attenuating SOX9 function.

Synonyms:

PRKG2, PRKGR2, cGKII

Product images:


Western blot analysis of cGKII (arrow) using cGKII Antibody (C-term). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the PRKG2 gene (Lane 2).



(LEFT)Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. (RIGHT)Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with cGKII antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining.