

Datasheet for ABIN968110 anti-PKN1 antibody (AA 215-388)



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Overview

Quantity:	50 µg
Target:	PKN1
Binding Specificity:	AA 215-388
Reactivity:	Human, Mouse, Rat, Dog
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This PKN1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunoprecipitation (IP)

Product Details

Immunogen:	Human PRK1 aa. 215-388
Clone:	49-PRK1
Isotype:	IgG1
Cross-Reactivity:	Dog (Canine), Rat (Rattus), Mouse (Murine)
Characteristics:	<ol style="list-style-type: none"> 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing. 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

Product Details

Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
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Target Details

Target:	PKN1
Alternative Name:	PRK1 (PKN1 Products)
Background:	<p>Members of the Protein Kinase C (PKC) family of homologous serine/threonine protein kinases are involved in a number of processes such as cell growth, cell differentiation, and cytokine secretion. PKCs are activated by Ca²⁺, phospholipids, diacylglycerol, phorbol esters, and proteolysis. PRK1 (PKC-Related Kinase 1, also named PKN) was originally identified in human hippocampus as a novel protein kinase with sequence homology to PKC. PRK1 contains 942 amino acids with an apparent molecular weight of 120 kDa. Although activated by limited proteolysis, PRK1 is not activated by Ca²⁺/diacylglycerol or phorbol esters. However, PRK1 is activated by phospholipids and arachidonic acid. PRK1 may regulate cytoskeletal changes since it binds to Rho-GTP and becomes phosphorylated in vivo, coincidentally with the formation of focal adhesions and stress fibers.</p> <p>Synonyms: PKN</p>
Molecular Weight:	120 kDa

Application Details

Restrictions:	For Research Use only
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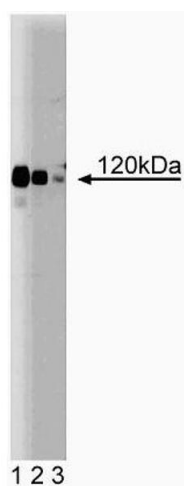
Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store undiluted at -20°C.

Publications

- Product cited in:
- Hughes, Larijani, Parker: "Detecting protein-phospholipid interactions. Epidermal growth factor-induced activation of phospholipase D1b in situ." in: **The Journal of biological chemistry**, Vol. 277, Issue 25, pp. 22974-9, (2002) ([PubMed](#)).
- Flynn, Mellor, Casamassima, Parker: "Rho GTPase control of protein kinase C-related protein kinase activation by 3-phosphoinositide-dependent protein kinase." in: **The Journal of biological chemistry**, Vol. 275, Issue 15, pp. 11064-70, (2000) ([PubMed](#)).
- Palmer, Ridden, Parker: "Cloning and expression patterns of two members of a novel protein-kinase-C-related kinase family." in: **European journal of biochemistry / FEBS**, Vol. 227, Issue 1-2, pp. 344-51, (1995) ([PubMed](#)).
- Mukai, Kitagawa, Shibata, Takanaga, Mori, Shimakawa, Miyahara, Hirao, Ono: "Activation of PKN, a novel 120-kDa protein kinase with leucine zipper-like sequences, by unsaturated fatty acids and by limited proteolysis." in: **Biochemical and biophysical research communications**, Vol. 204, Issue 1, pp. 348-56, (1994) ([PubMed](#)).

Images



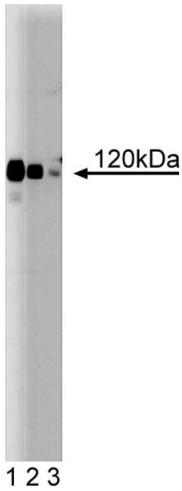
Western Blotting

Image 1. Western blot analysis of PRK1 on Jurkat lysate.

Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of PRK1.



Image 2. MCF7



Western Blotting

Image 3.