



Qty: 200µg/400 µl

Mouse anti- PKC-γ

Catalog No. 13-3800

Lot No. See product label

Mouse anti-PKC-γ

FORM

This monoclonal antibody is supplied as a 400 µl aliquot at 0.5 mg/ml in phosphate buffered saline, pH 7.4, with 0.1% sodium azide (NaN₃). The antibody was purified from ascites raised in Balb/C mice.

CLONE: PKC66^(1,2)

ISOTYPE: IgG₁

B CELL DONOR: Balb/c

IMMUNOGEN: Purified rat brain PKC.

SPECIFICITY

This antibody is specific for PKC-γ (Type I).

REACTIVITY

This antibody reacts with mouse, rat, and human brain PKC_γ.

USAGE

This antibody can be used in ELISA. Optimal dilutions should be determined by the researcher for each application.

Immunohistochemistry (paraffin⁽⁵⁻⁷⁾): 1:25-100

Western blotting⁽²⁾: 1:1,000-2,000

STORAGE

Store at 2-8°C for up to one month. Store at -20°C for long term storage. Avoid repeated freezing and thawing.

BACKGROUND

Protein Kinase C (PKC), one of the most important proteins in signal transduction is involved with cell proliferation, differentiation, and function. PKC is a family of Ca⁺⁺/phosphatidylserine-dependent, serine/threonine kinases with 12 known isozyme members (α, βI, βII, γ, δ, ε, ζ, η, θ, λ, μ, ι). PKC isozyme expression and distribution varies at both the tissue and intracellular levels. PKC is activated by diacylglycerol and has many different functions, which are dependent on isozyme type and location. PKC γ (gamma, PKC type I) has a molecular weight of 78 kD and is found predominantly in the brain and spinal cord^(1,2,3,4).

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PI133800

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REFERENCES

1. Clark, E. and Lee, V.; The Differential Role of Protein Kinase C Isozymes in the Rapid Induction of Neurofilament Phosphorylation by Nerve Growth Factor and Phorbol Esters in PC12 Cells. *J Neurochemistry* 57:802-810 (1991).
2. Clark, E. et al; Characterization and Differential Distribution of the Three Major Human Protein Kinase C Isozymes (PKC α , PKC β , PKC γ) of the Central Nervous System in Normal and Alzheimer's Disease Brains. *Laboratory Investigation* 64: (1) 35-44 (1991).
3. Nishizuka, Y.; Studies and prospectives of the protein kinase C family for cellular regulation. *Cancer* 63:1892-1903 (1989).
4. Nishizuka, Y.; Intracellular signaling by hydrolysis of phospholipids and activation of protein kinaseC. *Science* 258:607-614
5. Trojanowski, J. Q., et al; *J. Comp. Neurol.* 310:365-376 (1991).
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7. Li, T-Y, et al; *Neurobiology of Aging* 15(1):1-9 (1994).

RELATED PRODUCTS

Product	Clone/PAD	Cat. No.
Goat x PKC	polyclonal	62-7900
Ms x PKC- β	8/1	13-3700
Rb x PKC- δ	polyclonal	71-3100
Product	Conjugate	Cat. No.
Goat anti-Mouse IgG (H+L) (ZyMAX™ Grade)	Purified	81-6500
	FITC	81-6511
	TRITC	81-6514
	Cy™3	81-6515
	Cy™5	81-6516
	HRP	81-6520
	AP	81-6522
	Biotin	81-6540
Protein A	Sepharose® 4B	10-1041
rec-Protein G	Sepharose® 4B	10-1241

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