



# Mouse anti-Human DGK $\theta$ monoclonal antibody, clone 35 (CABT-B9192)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Immunogen</b>	Human DGK $\theta$ aa. 677-883
<b>Isotype</b>	IgG1
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Rat, Human, Mouse, Rabbit
<b>Clone</b>	35
<b>Purification</b>	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB; IF; IHC
<b>Format</b>	Liquid
<b>Concentration</b>	250 $\mu$ g/ml
<b>Size</b>	50 $\mu$ g, 150 $\mu$ g
<b>Buffer</b>	Aqueous buffered solution containing BSA, glycerol, and $\leq 0.09\%$ sodium azide.
<b>Storage</b>	Store undiluted at $-20^{\circ}\text{C}$ .

## BACKGROUND

**Introduction** The protein kinase C pathway is a major signal transduction system that is activated upon

stimulation of transmembrane receptors by hormones, neurotransmitters, and growth factors. Key mediators in this pathway are increased intracellular free  $\text{Ca}^{2+}$  levels and formation of diacylglycerol (DAG). DGK $\theta$  (diacylglycerol kinase  $\theta$ ) restricts PKC activation through the phosphorylation of DAG molecules that contain an unsaturated fatty acid at the sn-2 position to produce phosphatidic acid (PA). DGK $\theta$  contains several regions that are found in signaling molecules where they function in lipid-protein and protein-protein interactions. A C-terminal catalytic domain, three CRDs (cysteine rich domains), a PH domain, and an N-terminal proline/glycine rich domain are structural features of DGK $\theta$ . Six potential PKC phosphorylation sites lie between CRD3 and the PH domain. Cell-specific expression differentiate multiple isoforms of DGK. DGK $\theta$  is expressed primarily within the cerebellar cortex and hippocampus of the brain, but is also found in the small intestine and liver. The presence of the RA (Ras-associating) domain suggests that DGK $\theta$  may mediate activity of the Ras-like small GTP binding proteins.

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<b>Keywords</b>	DGKQ; diacylglycerol kinase, theta 110kDa; DAGK; DAGK4; DAGK7; diacylglycerol kinase theta; DGK-theta; DAG kinase theta; diglyceride kinase theta;
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## GENE INFORMATION

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<b>Entrez Gene ID</b>	<a href="#">1609</a>
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<b>UniProt ID</b>	<a href="#">P52824</a>
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