

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human DGK-ε in direct ELISAs and human, mouse and rat DGK-ε in Western blots. In Western blots, approximately 10-50% cross-reactivity with recombinant human DGK zeta, eta, iota, alpha, theta, gamma, kappa, delta, and beta is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 670914
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human DGK-ε Asn314-Arg435 Accession # P52429
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

DGK-ε (Diacylglycerol kinase epsilon) is a 65 kDa member of the eukaryotic diacylglycerol kinase family of enzymes. It is a type III DGK that possesses only a C1/Cys-rich domain and a catalytic region, and is found in neurons and testis. DGK-ε specifically phosphorylates arachidonate-containing DAG, and may downregulate DAG signaling that results from inositol cycling. Human DGK-ε is 567 amino acids (aa) in length. It contains one predicted transmembrane domain (aa 22-42), two C1 DAG-binding regions (aa 59-108 and 124-177) and one catalytic domain (aa 219-350). DGK-ε is predicted to form intramembrane oligomers. Over aa 314-435, human DGK-ε shares 99% aa identity with mouse DGK-ε.

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