Human/Mouse/Rat DGK-ε Antibody

Monoclonal Mouse IgG_{2B} Clone # 670914

Catalog Number: MAB5125

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	*E. coli*-derived recombinant human DGK-ε Asn314-Arg435 Accession # P52429
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS.

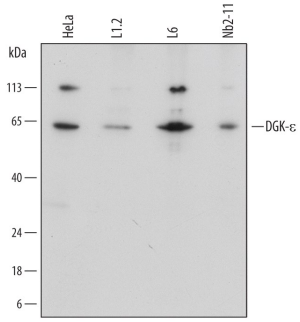
APPLICATIONS

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.*

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below

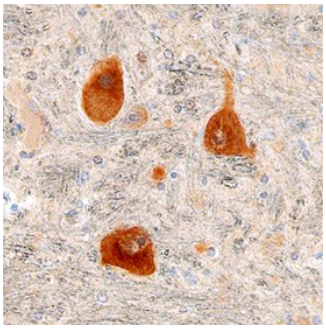
DATA

Western Blot



Detection of Human, Mouse, and Rat DGK-ε by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line, L1.2 mouse pro-B cell line, L6 rat myoblast cell line, and Nb2-11 rat lymphoma cell line. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human DGK-ε Monoclonal Antibody (Catalog # MAB5125) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for DGK-ε at approximately 64 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunohistochemistry



DGK-ε in Human Brain. DGK-ε was detected in immersion fixed paraffin-embedded sections of human brain (medulla) using Mouse Anti-Human DGK-ε Monoclonal Antibody (Catalog # MAB5125) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to neurons. This application has not yet been tested in mouse or rat samples. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

DGK-ε (Diacylglycerol kinase epsilon) is a 65 kDa member of the eukaryocytic 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.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956