

DESCRIPTION

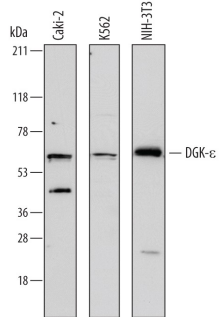
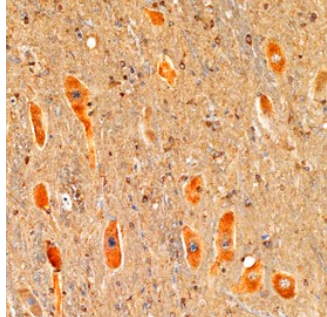
Species Reactivity	Human/Mouse
Specificity	Detects recombinant human DGK-ε in direct ELISAs. Detects human and mouse DGK-ε in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human DGK-ε Asn314-Arg435 Accession # P52429
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or 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	5-15 μg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human and Mouse DGK-ε by Western Blot. Western blot shows lysates of Caki-2 human clear cell carcinoma epithelial cell line, K562 human chronic myelogenous leukemia cell line, and NIH-3T3 mouse embryonic fibroblast cell line. PVDF membrane was probed with 1 μg/mL of Sheep Anti-Human DGK-ε Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7069) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for DGK-ε at approximately 65 kDa (as indicated). This experiment was conducted under reducing conditions and using <i>Immunoblot Buffer Group 1</i>.</p>	<p>Immunohistochemistry</p>  <p>DGK-ε in Human Brainstem. DGK-ε was detected in immersion fixed paraffin-embedded sections of human brainstem using Sheep Anti-Human DGK-ε Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7069) at 10 μg/mL overnight at 4 °C. Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to neuronal cell bodies and processes. View our protocol for <i>Chromogenic IHC Staining of Paraffin-embedded Tissue Sections</i>.</p>
---	---

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 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. <ul style="list-style-type: none"> • 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 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 would appear to contain one 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 apparently can form intramembrane oligomers. Over aa 314-435, human DGK-ε shows 99% aa identity to mouse DGK-ε.