

DESCRIPTION

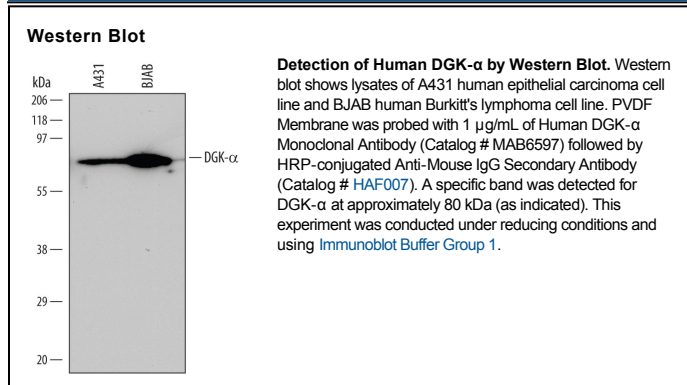
Species Reactivity	Human
Specificity	Detects human DGK- α in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 612413
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human DGK- α Met1-Glu162 (predicted) Accession # NP_001336
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m 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 μ g/mL	See Below

DATA



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. <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- α (Diacylglycerol kinase alpha) is an 80 kDa, 735 amino acid (aa), type I member of the eukaryotic diacylglycerol kinase family of enzymes, possessing EF-hand, C1/Cys-rich zinc finger and catalytic domains. In T cells, IL-2 stimulates its translocation to the nucleus, promoting proliferation. TCR stimulation, however, promotes migration to the plasma membrane to downregulate RAS activation and maintain energy. It also participates in VEGF or HGF-mediated motility in endothelial, epithelial, or cancer cells. Over aa 1-162, which includes the first of two EF-hand motifs, human DGK- α shares ~75% aa identity with mouse and rat DGK- α .