

Anti-DGK epsilon Antibody

Catalog # AP53847

Product Information

Application	WB, IHC
Primary Accession	P52429
Reactivity	Human, Rat, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	63927

Additional Information

Gene ID	8526
Other Names	DAGK5; Diacylglycerol kinase epsilon; DAG kinase epsilon; Diglyceride kinase epsilon; DGK-epsilon
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human DGK epsilon. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000 IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	DGKE
Synonyms	DAGK5
Function	Membrane-bound diacylglycerol kinase that converts diacylglycerol/DAG into phosphatidic acid/phosphatidate/PA and regulates the respective levels of these two bioactive lipids (PubMed: 15544348 , PubMed: 19744926 , PubMed: 21477596 , PubMed: 22108654 , PubMed: 23949095). Thereby, acts as a central switch between the signaling pathways activated by these second messengers with different cellular targets and opposite effects in numerous biological processes (PubMed: 15544348 , PubMed: 8626589). Also plays an important role in the biosynthesis of complex lipids (PubMed: 8626589). Displays specificity for diacylglycerol substrates with an arachidonoyl acyl chain at the sn-2 position, with the highest activity toward 1-octadecanoyl-2-(5Z,8Z,11Z,14Z-eicosatetraenoyl)-sn-glycerol the main diacylglycerol intermediate within the phosphatidylinositol turnover cycle (PubMed: 19744926 , PubMed: 22108654 , PubMed: 23274426). Can also

phosphorylate diacylglycerol substrates with a linoleoyl acyl chain at the sn-2 position but much less efficiently (PubMed:[22108654](#)).

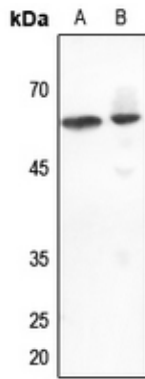
Cellular Location

Membrane; Single- pass membrane protein. Cytoplasm

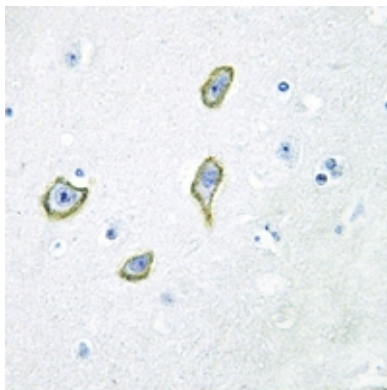
Tissue Location

Expressed predominantly in testis. Expressed in endothelium, platelets and podocytes (at protein level)

Images



Western blot analysis of DGK epsilon expression in HEK293T (A), rat spleen (B) whole cell lysates. (Predicted band size: 63 kD; Observed band size: 64 kD)



Immunohistochemical analysis of DGK epsilon staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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