

## Product datasheet for **AP06647PU-N**

### DGKI Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500-1/1000. <b>Immunohistochemistry on paraffin sections:</b> 1/50-1/200. <b>Immunofluorescence:</b> 1/50-1/200.
Reactivity:	Human, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 1001-1050 of Human DGK- $\iota$ .
Specificity:	This antibody detects endogenous levels of DGK- $\iota$ protein. (region surrounding Lys1023)
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 15 mM sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 130 kDa
Gene Name:	diacylglycerol kinase iota
Database Link:	<a href="#">Entrez Gene 688705 Rat</a> <a href="#">Entrez Gene 9162 Human</a> <a href="#">O75912</a>



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**Background:**

Diacylglycerol (DAG) influences numerous cell signaling cascades by functioning as an intracellular, allosteric activator of protein kinase C (PKC), and as a potent activator of guanine nucleotide exchange factors. In order to maintain cellular homeostasis, intracellular DAG levels are tightly regulated by diacylglycerol kinases (DGKs, DAGKs), which phosphorylate DAG to phosphatidic acid, thus removing DAG. Human DGK- $\alpha$  (80 kDa), - $\beta$  (90 kDa), and - $\gamma$  (90 kDa) have calcium-binding EF-hand motifs at their N termini and are classified as type I DGKs. Human DGK- $\delta$  (130 kDa) and DGK- $\epsilon$  (130 kDa) contain N-terminal pleckstrin homology (PH) domains and are classified as type II. Human DGK-epsilon (64 kDa) contains no identifiable regulatory domains and is classified as a type III DGK. Human DGK- $\Omega$  (104 kDa) and -iota (130 kDa) possess C-terminal ankyrin repeats and are classified as type IV DGKs. Human DGK- $\theta$  (110 kDa) contains 3 cysteine-rich domains and a PH domain and is classified as a type V DGK.

**Synonyms:**

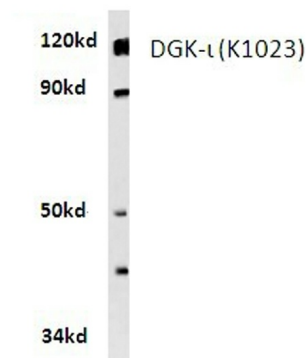
Diacylglycerol kinase iota, DGKI

**Protein Families:**

Druggable Genome

**Protein Pathways:**

Glycerolipid metabolism, Glycerophospholipid metabolism, Metabolic pathways, Phosphatidylinositol signaling system

**Product images:**

Western blot (WB) analysis of DGK- $\iota$  antibody in extracts from HeLa cells.

HeLa whole cell lysate  
DGK- $\iota$  (K1023) pAb at 1:500 dilution