

# Active Diacylglycerol Kinase Epsilon (DGKe) Instruction Manual

## SBPE356Hu01

**Homo sapiens (Human)**

**Buffer Formulation**

20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.

**Traits**

Freeze-dried powder

**Purity**

> 95%

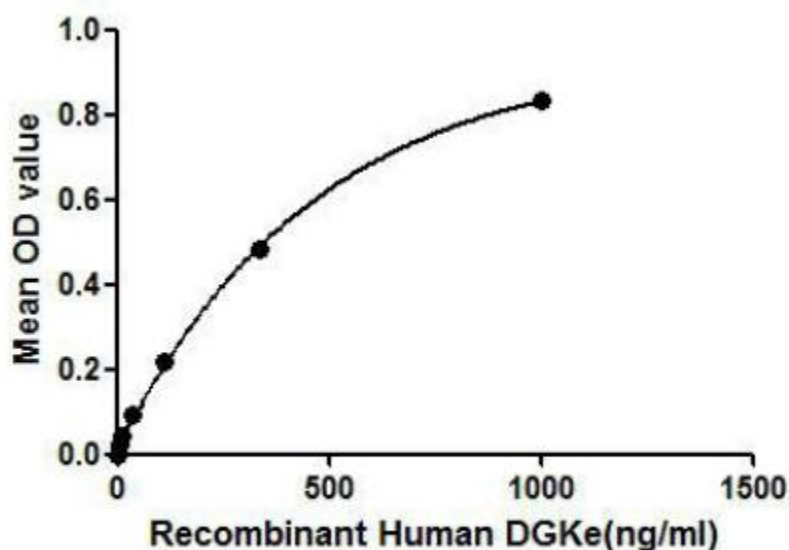
**Isoelectric Point**

7.7

**Applications**

Cell culture; Activity Assays.

### ACTIVITY TEST



**Figure 1. The binding activity of DGKe with PDHA.**

DGKe (Diacylglycerol kinase epsilon) is an enzyme that mainly involved in the regeneration of phosphatidylinositol (PI) from diacylglycerol in the PI-cycle during cell signal transduction. PDHA1 (Pyruvate dehydrogenase E1 component subunit alpha) has been proven to be an interactor of DGKe through Affinity Capture-MS. Thus a binding ELISA assay was conducted to detect the interaction of recombinant human DGKe and recombinant human PDHA. Briefly, DGKe were diluted serially in PBS, with 0.01%BSA (pH 7.4). Duplicate samples of 100uL DGKe were then transferred to PDHA-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-DGKe pAb, then aspirated and washed 3 times. After

incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µL stop solution to the wells and read at 450nm immediately. The binding activity of DGKe and PDHA was shown in Figure 1, and this effect was in a dose dependent manner.

## USAGE

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

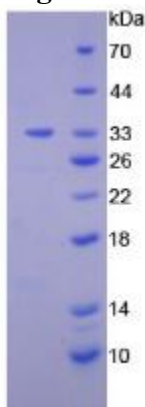
## STORAGE

Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

## STABILITY

The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

## Image



SDS-PAGE Image

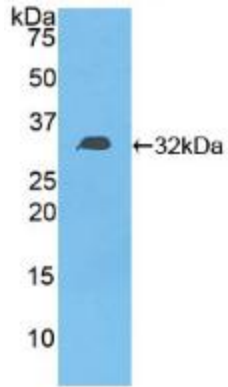


Figure. Western Blot; Sample: Recombinant DGKe, Human.

**[IMPORTANT NOTE]**

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.