

# CARKL (A53) polyclonal antibody

Catalog: BCP00331 Host: Rabbit Reactivity: Human, Mouse, Rat

#### **BackGround:**

CARKL, also known as SHPK (sedoheptulokinase), is a 478 amino acid protein that localizes to the cytoplasm and belongs to the FGGY family of protein kinases. Expressed at high levels in kidney, pancreas and liver and at lower levels in heart, placenta, brain and lung, CARKL functions at an optimal pH of 8.5 and catalyzes the ATP-dependent phosphorylation of sedoheptulose to yield sedoheptulose 7-phosphate, an intermediate in the pentose phosphate pathway. Once phosphorylated, sedoheptulose is unable to exit the cell via the cell membrane, resulting in the containment of sedoheptulose 7-phosphate within the cell. Defects in the gene encoding CARKL are associated with cystinosis, an autosomal recessive genetic disorder of the renal tubules that is characterized by excessive urination and low blood levels of phosphates and potassium.

## **Product:**

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

# **Molecular Weight:**

~ 51 kDa

# **Swiss-Prot:**

Q9UHJ6

## **Purification&Purity:**

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

## **Applications:**

WB: 1:500~1:1000

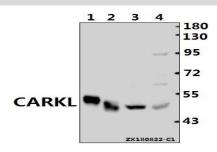
#### Storage&Stability:

Store at  $4\,\mathrm{C}$  short term. Aliquot and store at  $-20\,\mathrm{C}$  long term. Avoid freeze-thaw cycles.

## **Specificity:**

CARKL pAb detects endogenous levels of CARKL protein.

## **DATA:**



Western blot (WB) analysis of CARKL (A53) pAb at 1:500 dilution

Lane1:The Kidney tissue lysate of Mouse(10ug)

Lane2:The Kidney tissue lysate of Rat(10ug)

Lane3:Panc1 whole cell lysate(40ug)

Lane4:L02 whole cell lysate(40ug)

#### Note:

For research use only, not for use in diagnostic procedure.