

## Product datasheet for **TA392791S**

### **CARKL (SHPK) Rabbit Polyclonal Antibody**

#### **Product data:**

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1:500~1:1000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 333-393 of Human AKAP 95.
Specificity:	CARKL pAb detects endogenous levels of CARKL protein.
Formulation:	Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2
Concentration:	1mg/ml
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.
Stability:	1 year
Predicted Protein Size:	~ 51 kDa
Gene Name:	sedoheptulokinase
Database Link:	<a href="#">Entrez Gene 23729 Human Q9UHJ6</a>
Background:	<p>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.</p>

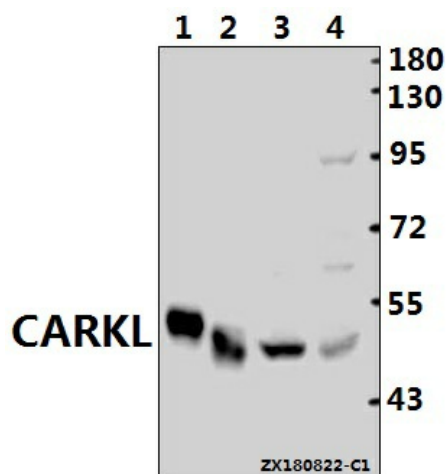


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**Synonyms:** A-kinase anchor protein 8; A-kinase anchor protein 95 kDa; AKAP-8; AKAP8; AKAP 95; AKAP95

**Note:** For research use only, not for use in diagnostic procedure.

**Product images:**



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)