



# CARKL Monoclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-mAb-14693                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Applications</b>                | WB                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Gene Name</b>                   | SHPK                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human CARKL. AA range:31-80                                                                                                                                                                                                                                                                                                                                                |
| <b>Specificity</b>                 | CARKL Monoclonal Antibody detects endogenous levels of CARKL protein.                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Source</b>                      | Monoclonal, Mouse,IgG                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Purification</b>                | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                           |
| <b>Dilution</b>                    | WB 1:500-1:2000                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Synonyms</b>                    | CARKL;sedoheptulokinase;SHK;SHPK;Carbohydrate kinase-like protein                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Observed Band</b>               | 55kD                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Calculated Molecular Weight</b> | 55kD                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Cell Pathway</b>                | Cytoplasm .                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Tissue Specificity</b>          | Strongly expressed in liver, kidney and pancreas. Expressed at lower levels in placenta and heart. Very weakly expressed in lung and brain.                                                                                                                                                                                                                                                                                                    |
| <b>Function</b>                    | catalytic activity:ATP + sedoheptulose = ADP + sedoheptulose 7-phosphate., disease:Deficiency of the SHPK gene in cystinosis patients with a common 57-Kb deletion causes urinary accumulation of sedoheptulose and erythritol., similarity:Belongs to the FGGY kinase family.,tissue specificity:Strongly expressed in liver, kidney and pancreas. Expressed at lower levels in placenta and heart. Very weakly expressed in lung and brain., |
| <b>Background</b>                  | sedoheptulokinase(SHPK) Homo sapiens The protein encoded by this gene has weak homology to several carbohydrate kinases, a class of proteins involved in the phosphorylation of sugars as they enter a cell, inhibiting return across the cell membrane. Sequence variation between this novel gene and known                                                                                                                                  |



carbohydrate kinases suggests the possibility of a different substrate, cofactor or changes in kinetic properties distinguishing it from other carbohydrate kinases. The gene resides in a region commonly deleted in cystinosis patients, suggesting a role as a modifier for the cystinosis phenotype. The genomic region is also rich in Alu repetitive sequences, frequently involved in chromosomal rearrangements. [provided by RefSeq, Jul 2008],

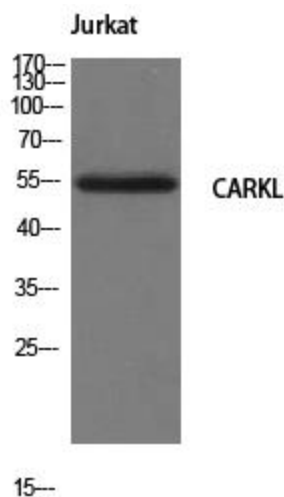
**matters needing attention**

Avoid repeated freezing and thawing!

**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

**Products Images**



Western Blot analysis of various cells using CARKL Monoclonal Antibody