

## Product datasheet for **CF503145**

### **CARKL (SHPK) Mouse Monoclonal Antibody [Clone ID: OT1D1]**

#### **Product data:**

<b>Product Type:</b>	Primary Antibodies
<b>Clone Name:</b>	OT1D1
<b>Applications:</b>	FC, WB
<b>Recommended Dilution:</b>	WB 1:2000, FLOW 1:100
<b>Reactivity:</b>	Human, Mouse, Rat
<b>Host:</b>	Mouse
<b>Isotype:</b>	IgG2a
<b>Clonality:</b>	Monoclonal
<b>Immunogen:</b>	Full length human recombinant protein of human SHPK (NP_037408) produced in HEK293T cell.
<b>Formulation:</b>	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
<b>Reconstitution Method:</b>	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
<b>Purification:</b>	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store at -20°C as received.
<b>Stability:</b>	Stable for 12 months from date of receipt.
<b>Predicted Protein Size:</b>	51.3 kDa
<b>Gene Name:</b>	sedoheptulokinase
<b>Database Link:</b>	<a href="#">NP_037408</a> <a href="#">Entrez Gene 74637 Mouse</a> <a href="#">Entrez Gene 287479 Rat</a> <a href="#">Entrez Gene 23729 Human</a> <a href="#">Q9UHJ6</a>



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**Background:**

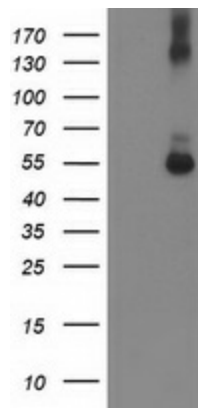
The protein encoded by this gene has weak homology to several carbohydrate kinases, a class of proteins involved in the phosphorylation of sugars as they enter a cell, inhibiting return across the cell membrane. Sequence variation between this novel gene and known carbohydrate kinases suggests the possibility 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]. COMPLETENESS: complete on the 3' end.

**Synonyms:**

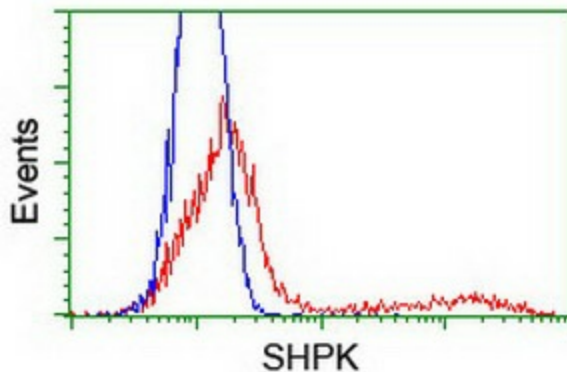
CARKL; SHK

**Protein Families:**

Druggable Genome

**Product images:**

HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY SHPK ([RC204421], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SHPK. Positive lysates [LY415695] (100ug) and [LC415695] (20ug) can be purchased separately from OriGene.



HEK293T cells transfected with either [RC204421] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-SHPK antibody ([TA503145]), and then analyzed by flow cytometry.