

For Research Use Only

# ALPK1 Monoclonal antibody

Catalog Number: 67689-1-Ig



## Basic Information

<b>Catalog Number:</b> 67689-1-Ig	<b>GenBank Accession Number:</b> BC060780	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul , Concentration: 791 ug/ml by Nanodrop and 500 ug/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 80216	<b>CloneNo.:</b> 2B8B5
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q96QP1	<b>Recommended Dilutions:</b> WB 1:2000-1:10000 IHC 1:250-1:1000 IF/ICC 1:200-1:800
<b>Isotype:</b> IgG1	<b>Full Name:</b> alpha-kinase 1	
<b>Immunogen Catalog Number:</b> AG5320	<b>Calculated MW:</b> 139 kDa	
	<b>Observed MW:</b> 139 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, ELISA

**Species Specificity:**  
human

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB :** COLO 320 cells, T-47D cells, A549 cells, U-87 MG cells, Daudi cells, THP-1 cells

**IHC :** human heart tissue,

**IF/ICC :** THP-1 cells,

## Background Information

Alpha-protein kinase 1, also known as alpha-kinase 1 (ALPK1), is associated with chronic kidney disease (CKD), myocardial infarction, gout and type 2 diabetes mellitus (DM). ALPK1 mutant has been reported to cause severe defects in motor co-ordination in mice. ALPK1 enhances the expression of proinflammatory cytokines including IL-1 $\beta$ , IL-8 and TGF- $\beta$ 1 in cultured human THP1 and human embryonic kidney 293 (HEK293) cells (PMID: 31557402, PMID: 26275947). ALPK1 short isoform (108 kDa) was highly expressed in brain, spinal cord, heart, lung, spleen, thymus, small intestine, skin and testis, while detectable in skeletal muscle and kidney. ALPK1 large isoform (130 kDa) appeared in heart, lung, thymus and skin (PMID: 21208416).

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

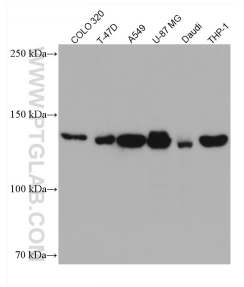
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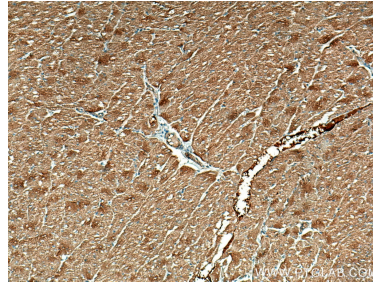
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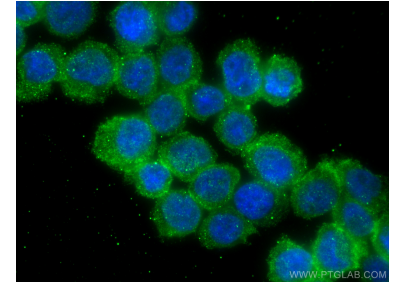
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 67689-1-Ig (ALPK1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 67689-1-Ig (ALPK1 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed THP-1 cells using ALPK1 antibody (67689-1-Ig, Clone: 2B885) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1).