

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 µg/ml by Nanodrop and 500 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 80216	<b>CloneNo.:</b> 2B8B5
<b>Source:</b> Mouse	<b>Full Name:</b> alpha-kinase 1	<b>Recommended Dilutions:</b> WB 1:2000-1:10000 IHC 1:250-1:1000
<b>Isotype:</b> IgG1	<b>Calculated MW:</b> 139 kDa	
<b>Immunogen Catalog Number:</b> AG5320	<b>Observed MW:</b> 139 kDa	

## Applications

### Tested Applications:

IHC, WB, 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,

## 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 inskeletal 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

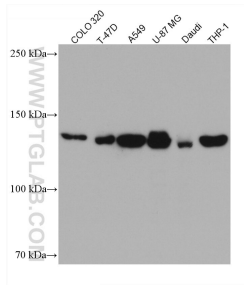
For technical support and original validation data for this product please contact:

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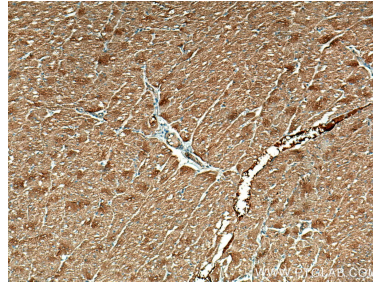
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## Selected Validation Data



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).