For Research Use Only

ALPK1 Monoclonal antibody

Catalog Number: 67689-1-Ig



Basic Information

Applications

Catalog Number: GenBank Accession Number: 67689-1-lg BC060780

Concentration: GeneID (NCBI): 80216

Source: UNIPROT ID:
Mouse Q96QP1
Isotype: Full Name:
IgG1 alpha-kinase 1
Immunogen Catalog Number: Calculated MW:
AG5320 139 kDa

Observed MW: 139 kDa

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

Purification Method: Protein G purification

CloneNo.: 2B8B5

Recommended Dilutions: WB 1:2000-1:10000 IHC 1:250-1:1000 IF/ICC 1:200-1:800

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 β , IL-8 and TGF- β 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

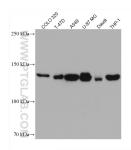
Storage:

Store at -20°C. Stable for one year after shipment. Storage Buffer:

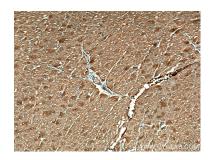
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

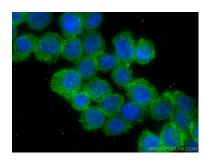
Selected Validation Data



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



Immunohistochemical analysis of paraffinembedded 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-lg, Clone: 2B8B5) at dilution of 1:400 and CoraLite®488-Conjugated Affini Pure Goat Anti-Mouse IgG(H+L) (SA00013-1).