

Anti- ALPK1 Antibody
Catalog # ABV11960**Specification**

Anti- ALPK1 Antibody - Product Information

Application	IHC, IF
Primary Accession	Q96QP1
Reactivity	Human
Host	Rabbit
Isotype	Rabbit IgG
Calculated MW	138861

Anti- ALPK1 Antibody - Additional Information**Gene ID** 80216

Positive Control	WB: LO2, HCT116, COLO205, HepG2 lysate; IHC: human breast cancer tissue; IF: HepG2 cells
Application & Usage	WB; 1:500 - 1:2000, IH; 1:100 - 1:200, IF/IC; 1:100 - 1:500

Other Names

KIAA1527; LAK; Alpha-protein kinase 1; Chromosome 4 kinase; Lymphocyte alpha-protein kinase

Target/Specificity

ALPK1

Antibody Form

Liquid

Appearance

Colorless liquid

Handling

The antibody solution should be gently mixed before use

Reconstitution & Storage

-20°C

Background Descriptions**Precautions**

Anti- ALPK1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti- ALPK1 Antibody - Protein Information

Name ALPK1 {ECO:0000303|PubMed:30111836, ECO:0000312|HGNC:HGNC:20917}

Function

Serine/threonine-protein kinase that detects bacterial pathogen-associated molecular pattern metabolites (PAMPs) and initiates an innate immune response, a critical step for pathogen elimination and engagement of adaptive immunity (PubMed:28877472, PubMed:28222186, PubMed:30111836). Specifically recognizes and binds ADP-D-glycero-beta- D-manno-heptose (ADP-Heptose), a potent PAMP present in all Gram- negative and some Gram-positive bacteria (PubMed:30111836). ADP-Heptose-binding stimulates its kinase activity to phosphorylate and activate TIFA, triggering pro-inflammatory NF-kappa-B signaling (PubMed:30111836). May be involved in monosodium urate monohydrate (MSU)-induced inflammation by mediating phosphorylation of unconventional myosin MYO9A (PubMed:27169898). May also play a role in apical protein transport by mediating phosphorylation of unconventional myosin MYO1A (PubMed:15883161). May play a role in ciliogenesis (PubMed:30967659).

Cellular Location

Cytoplasm, cytosol. Cytoplasm, cytoskeleton, spindle pole Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cell projection, cilium. Note=Localized at the base of primary cilia.

Tissue Location

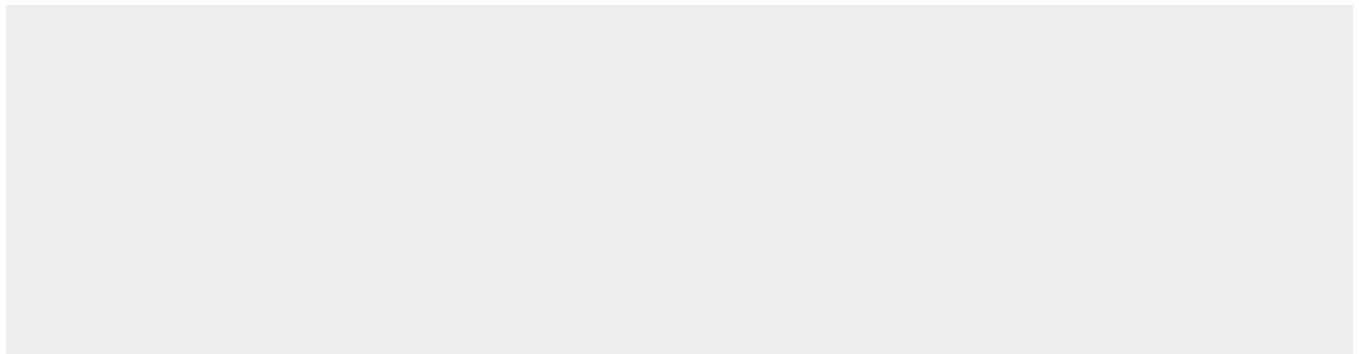
Highly expressed in liver. Expressed in the optic nerve and retinal pigmented epithelium. Lower expression is observed in the macula and extramacular retina (PubMed:30967659)

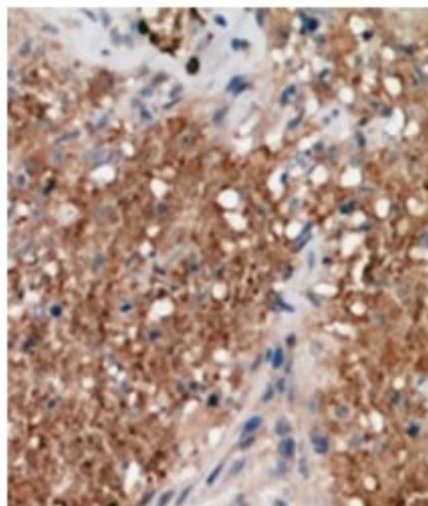
Anti- ALPK1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

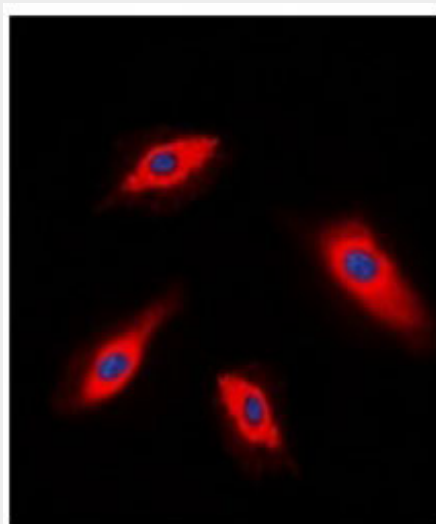
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti- ALPK1 Antibody - Images





Immunohistochemical analysis of ALPK1 staining in human breast cancer formalin fixed paraffin embedded tissue section



Immunofluorescent analysis of ALPK1 staining in HepG2 cells