

ALPK1 Antibody (aa11-60)
Rabbit Polyclonal Antibody
Catalog # ALS16714**Specification**

ALPK1 Antibody (aa11-60) - Product Information

Application	IHC, WB
Primary Accession	O96QP1
Other Accession	80216
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	138861

ALPK1 Antibody (aa11-60) - Additional Information**Gene ID** 80216**Other Names**

ALPK1, Alpha-protein kinase 1, Chromosome 4 kinase, LAK, Lymphocyte alpha-kinase, KIAA1527, Alpha-kinase 1

Target/Specificity

ALPK1 Antibody detects endogenous levels of total ALPK1 protein.

Reconstitution & StoragePBS (without Mg²⁺, Ca²⁺), pH 7.4, 150 mM sodium chloride, 0.02% sodium azide, 50% glycerol.
Store at -20°C for up to one year.**Precautions**

ALPK1 Antibody (aa11-60) is for research use only and not for use in diagnostic or therapeutic procedures.

ALPK1 Antibody (aa11-60) - 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)

Volume

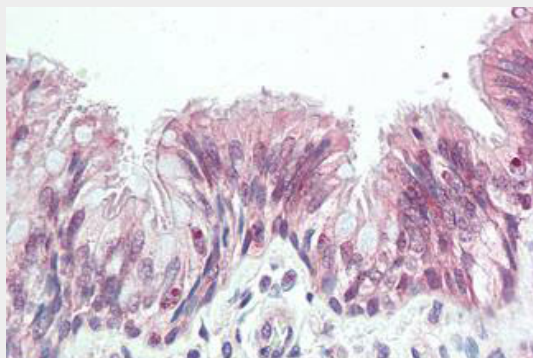
50 µl

ALPK1 Antibody (aa11-60) - Protocols

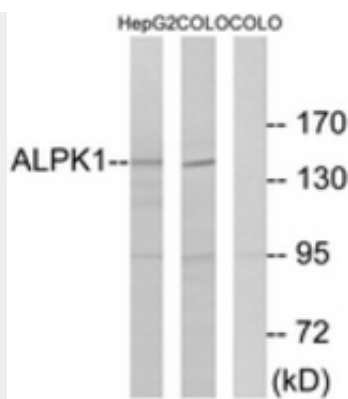
Provided below are standard protocols that you may find useful for product applications.

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

ALPK1 Antibody (aa11-60) - Images



Anti-ALPK1 antibody IHC staining of human bronchus.



Western blot of extracts from COLO/HepG2 cells, using ALPK1 Antibody.

ALPK1 Antibody (aa11-60) - Background

Kinase that recognizes phosphorylation sites in which the surrounding peptides have an alpha-helical conformation.

ALPK1 Antibody (aa11-60) - References

- Ryazanov A.G., et al. Curr. Biol. 9:R43-R45(1999).
Ota T., et al. Nat. Genet. 36:40-45(2004).
Hillier L.W., et al. Nature 434:724-731(2005).
Jikuya H., et al. Submitted (SEP-2003) to the EMBL/GenBank/DDBJ databases.
Nagase T., et al. DNA Res. 7:143-150(2000).