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Anti- ALPK1 Antibody

Catalog # ABV11960

Product Information

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

Additional Information

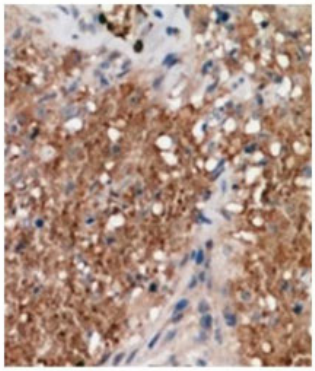
Gene ID	80216
Positive Control	WB: LO2, HCT116, COLO205, HepG2 lysate; IHC: human breast cancer tissue; IF: HepG2 cells
Application & Usage	WB; 1:500 – 1:2000, IH; 1:100 – 1:200, IF/IC; 1:100 – 1:500
Other Names	KIAA1527; LAK; Alpha-protein kinase 1; Chromosome 4 kinase; Lymphocyte alpha-protein kinase
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.

Protein Information

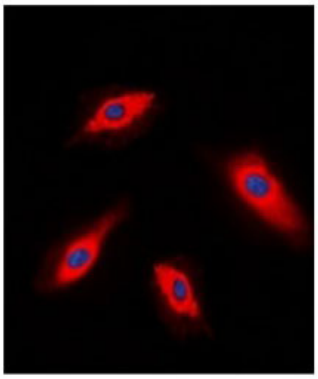
Name	ALPK1 {ECO:0000303|PubMed:30111836, ECO:0000312|HGNC:HGNC:20917}
Function	Serine/threonine-protein kinase that detects bacterial pathogen-associated molecular pattern metabolites (PAMPs) and initiates an innate immune response, a critical step for pathogen elimination and engagement of adaptive immunity (PubMed:28222186, PubMed:28877472, 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, PubMed:35868845, PubMed:38060563). 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)

Images



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



Immunofiuorescent analysis of ALPK1 staining in HepG2 cells

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.