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Anti-DAP Kinase 1 DAPK1 Rabbit Monoclonal Antibody

Catalog # ABO14116

Specification

Anti-DAP Kinase 1 DAPK1 Rabbit Monoclonal Antibody - Product Information

Application	**WB, IHC, IF, ICC**
Primary Accession	P53355
Host	**Rabbit**
Isotype	**Rabbit IgG**
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Format	**Liquid**

Description
Anti-DAP Kinase 1 DAPK1 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF applications. This antibody reacts with Human, Mouse, Rat.

Anti-DAP Kinase 1 DAPK1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 1612

Other Names
Death-associated protein kinase 1, DAP kinase 1, 2.7.11.1, DAPK1, DAPK

Calculated MW
160046 MW KDa

Application Details
WB 1:500-1:2000
IHC 1:50-1:200
ICC/IF 1:50-1:200

Subcellular Localization
Isoform 1: Cytoplasm. Cytoplasm, cytoskeleton. Colocalizes with MAP1B in the microtubules and cortical actin fibers.

Tissue Specificity
Isoform 2 is expressed in normal intestinal tissue as well as in colorectal carcinomas..

Contents
Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen
A synthesized peptide derived from human DAP Kinase 1

Purification
Affinity-chromatography

Storage	**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated**

freeze-thaw cycles.

Anti-DAP Kinase 1 DAPK1 Rabbit Monoclonal Antibody - Protein Information

Name DAPK1

Synonyms DAPK

Function
Calcium/calmodulin-dependent serine/threonine kinase involved in multiple cellular signaling pathways that trigger cell survival, apoptosis, and autophagy. Regulates both type I apoptotic and type II autophagic cell deaths signal, depending on the cellular setting. The former is caspase-dependent, while the latter is caspase-independent and is characterized by the accumulation of autophagic vesicles. Phosphorylates PIN1 resulting in inhibition of its catalytic activity, nuclear localization, and cellular function. Phosphorylates TPM1, enhancing stress fiber formation in endothelial cells. Phosphorylates STX1A and significantly decreases its binding to STXBP1. Phosphorylates PRKD1 and regulates JNK signaling by binding and activating PRKD1 under oxidative stress. Phosphorylates BECN1, reducing its interaction with BCL2 and BCL2L1 and promoting the induction of autophagy. Phosphorylates TSC2, disrupting the TSC1-TSC2 complex and stimulating mTORC1 activity in a growth factor-dependent pathway. Phosphorylates RPS6, MYL9 and DAPK3. Acts as a signaling amplifier of NMDA receptors at extrasynaptic sites for mediating brain damage in stroke. Cerebral ischemia recruits DAPK1 into the NMDA receptor complex and it phosphorylates GRINB at Ser-1303 inducing injurious Ca(2+) influx through NMDA receptor channels, resulting in an irreversible neuronal death. Required together with DAPK3 for phosphorylation of RPL13A upon interferon-gamma activation which is causing RPL13A involvement in transcript-selective translation inhibition.

Cellular Location
[Isoform 1]: Cytoplasm. Cytoplasm, cytoskeleton. Note=Colocalizes with MAP1B in the microtubules and cortical actin fibers

Tissue Location
Isoform 2 is expressed in normal intestinal tissue as well as in colorectal carcinomas.

Anti-DAP Kinase 1 DAPK1 Rabbit Monoclonal 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 Cytomety
- Cell Culture

Anti-DAP Kinase 1 DAPK1 Rabbit Monoclonal Antibody - Images

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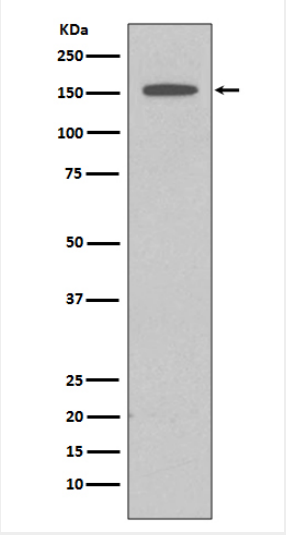
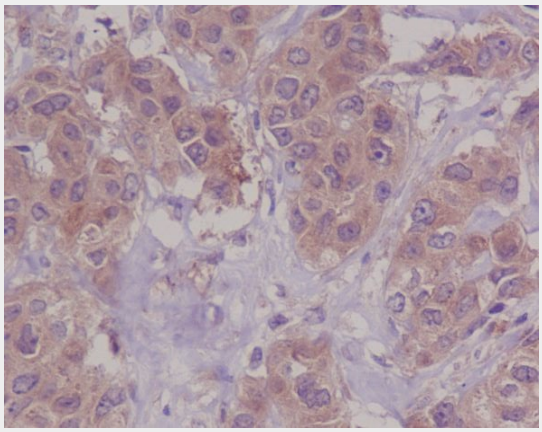
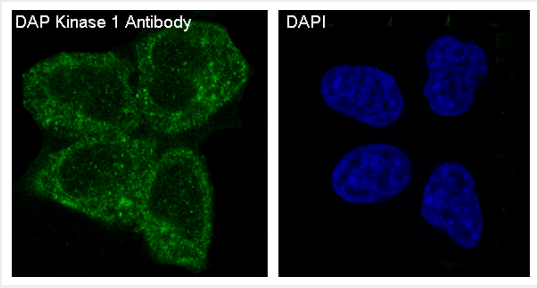


Western blot analysis of DAP Kinase 1 expression in HeLa cell lysate.



Immunohistochemical analysis of paraffin-embedded human breast cancer, using DAP Kinase 1 Antibody.



Immunofluorescent analysis of Hela cells, using DAP Kinase 1 Antibody.