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Anti-14-3-3 gamma Antibody [KO/KD Validated]

Catalog # AP51619

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P61981
Reactivity	Human, Mouse, Rat, Zebrafish, Chicken, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	28303

Additional Information

Gene ID	7532
Other Names	14-3-3 protein gamma; Protein kinase C inhibitor protein 1; KCIP-1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human 14-3-3 gamma. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

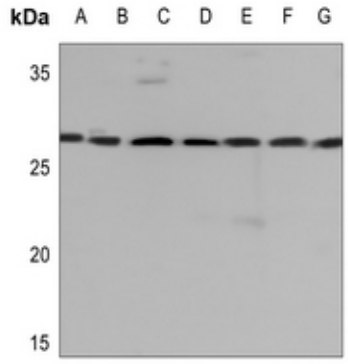
Name	YWHAG (HGNC:12852)
Function	Adapter protein implicated in the regulation of a large spectrum of both general and specialized signaling pathways (PubMed:15696159, PubMed:16511572, PubMed:36732624). Binds to a large number of partners, usually by recognition of a phosphoserine or phosphothreonine motif (PubMed:15696159, PubMed:16511572, PubMed:36732624). Binding generally results in the modulation of the activity of the binding partner (PubMed:16511572). Promotes inactivation of WDR24 component of the GATOR2 complex by binding to phosphorylated WDR24 (PubMed:36732624). Participates in the positive regulation of NMDA glutamate receptor activity by promoting the L- glutamate secretion through interaction with BEST1 (PubMed:29121962). Reduces keratinocyte intercellular adhesion, via interacting with PKP1 and sequestering it in the cytoplasm, thereby reducing its incorporation into desmosomes (PubMed:29678907). Plays a role in mitochondrial protein catabolic process (also named MALM) that promotes the degradation of damaged proteins inside mitochondria (PubMed:22532927).

Cellular Location	Cytoplasm, cytosol. Mitochondrion matrix. Note=Translocates to the mitochondrial matrix following induction of MALM (mitochondrial protein catabolic process).
Tissue Location	Highly expressed in brain, skeletal muscle, and heart.

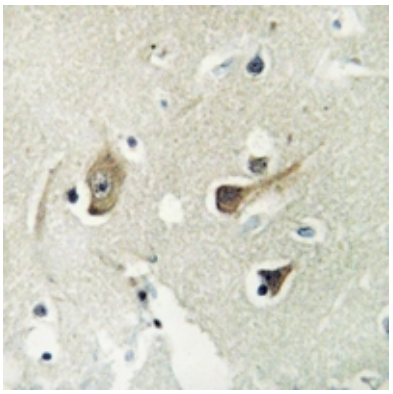
References

Autieri M.V.,et al.DNA Cell Biol. 18:555-564(1999).
Horie M.,et al.Genomics 60:241-243(1999).
Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
Hillier L.W.,et al.Nature 424:157-164(2003).
Bienvenut W.V.,et al.Submitted (DEC-2008) to UniProtKB.

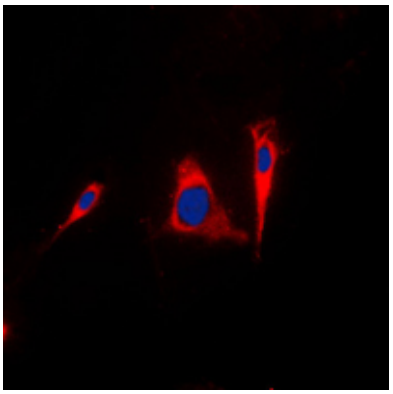
Images



Western blot analysis of 14-3-3 gamma expression in HEK293T (A), A549 (B), MCF7 (C), mouse lung (D), mouse liver (E), rat lung (F), rat liver (G) whole cell lysates. (Predicted band size: 28 kD; Observed band size: 28 kD)

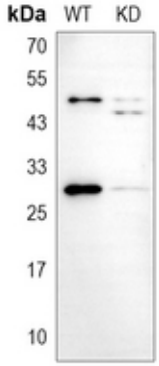


Immunohistochemical analysis of 14-3-3 gamma staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of 14-3-3 gamma staining in A431 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

Western blot analysis of 14-3-3 gamma expression in wild



type (WT) and knockdown (KD) HeLa cell lysates.

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