

Rabbit ACK1 Polyclonal Antibody | anti-ACK1 antibody

Phospho-ACK1 (Tyr284) Antibody

CATALOG # AAA328491	HOST Rabbit	REACTIVITY Human, Mouse, RatPredicted: Pig, Bovine, Horse, Rabbit, Dog, Chicken, Xenopus	APPLICATIONS ELISA, Immunohistochemistry, Western Blot
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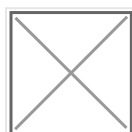
PRODUCT SYNONYMS

ACK1; Polyclonal Antibody; Phospho-ACK1 (Tyr284) Antibody; Acetate kinase 1; Acetokinase 1; ACK 1; ACK; ACK-1; ACK1_HUMAN; Activated Cdc42 associated kinase 1; Activated CDC42 kinase 1; Activated p21cdc42Hs kinase; FLJ44758; FLJ45547; p21cdc42Hs; TNK 2; TNK2; Tyrosine kinase non receptor 2; Tyrosine kinase non receptor protein 2; Tyrosine kinase non-receptor protein 2; anti-ACK1 antibody

PRODUCT SPECIFICATIONS

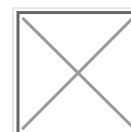
Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted: Pig, Bovine, Horse, Rabbit, Dog, Chicken, Xenopus
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-ACK1 (Tyr284) Antibody detects endogenous levels of ACK1 only when phosphorylated at Tyr284.
Purity/Purification	Purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
Form/Format	Liquid; Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	1086
Applicable Applications for anti-ACK1 antibody	ELISA (Peptide ELISA), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human ACK1 around the phosphorylation site of Tyr284.
Tissue Specificity	The Tyr-284 phosphorylated form shows a significant increase in expression in breast cancers during the progressive stages i.e. normal to hyperplasia (ADH), ductal carcinoma in situ (DCIS), invasive ductal carcinoma (IDC) and lymph node metastatic (LNMM) stages. It also shows a significant increase in expression in prostate cancers during the progressive stages.
Subcellular Location	Endosome; Nucleus; Plasma Membrane
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

Western blot analysis of Phospho-ACK1 (Tyr284) in lysates of HepG2 EGF 200ng/ml 30', using Phospho-ACK1 (Tyr284) Antibody.



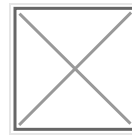
IHC (Immunohistochemistry)

At 1/100 staining human lung cancer tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary



IHC (Immunohistochemistry)

At 1/100 staining rat heart tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary



IHC (Immunohistochemistry)

At 1/100 staining mouse heart tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary

ADDITIONAL INFORMATION

Related Product Information for anti-ACK1 antibody

Description: Non-receptor tyrosine-protein and serine/threonine-protein kinase that is implicated in cell spreading and migration, cell survival, cell growth and proliferation. Transduces extracellular signals to cytosolic and nuclear effectors. Phosphorylates AKT1, AR, MCF2, WASL and WWOX. Implicated in trafficking and clathrin-mediated endocytosis through binding to epidermal growth factor receptor (EGFR) and clathrin. Binds to both poly- and mono-ubiquitin and regulates ligand-induced degradation of EGFR, thereby contributing to the accumulation of EGFR at the limiting membrane of early endosomes. Downstream effector of CDC42 which mediates CDC42-dependent cell migration via phosphorylation of BCAR1. May be involved both in adult synaptic function and plasticity and in brain development. Activates AKT1 by phosphorylating it on 'Tyr-176'. Phosphorylates AR on 'Tyr-267' and 'Tyr-363' thereby promoting its recruitment to androgen-responsive enhancers (AREs). Phosphorylates WWOX on 'Tyr-287'. Phosphorylates MCF2, thereby enhancing its activity as a guanine nucleotide exchange factor (GEF) toward Rho family proteins. Contributes to the control of AXL receptor levels. Confers metastatic properties on cancer cells and promotes tumor growth by negatively regulating tumor suppressor such as WWOX and positively regulating pro-survival factors such as AKT1 and AR. Phosphorylates WASP (PubMed:20110370).

Post Translational Modifications: Autophosphorylation regulates kinase activity. Phosphorylation on Tyr-518 is required for interaction with SRC and is observed during association with clathrin-coated pits. Polyubiquitinated by NEDD4 and NEDD4L. Degradation can be induced by EGF and is lysosome-dependent (By similarity).

Subunit Structure: Interacts with NEDD4 (via WW3 domain). NEDD4L and EGF promote association with NEDD4 (By similarity). Homodimer. Interacts with AR, CDC42, WWASL and WWOX. Interacts with CSPG4 (activated). Interacts with MERTK (activated); stimulates autophosphorylation. May interact (phosphorylated) with HSP90AB1; maintains kinase activity. Interacts with NPHP1. Interacts with SNX9 (via SH3 domain). Interacts with SRC (via SH2 and SH3 domain). Interacts with EGFR, and this interaction is dependent on EGF stimulation and kinase activity of EGFR. Interacts (via kinase domain) with AKT1. Part of a collagen stimulated complex involved in cell migration composed of CDC42, CRK, TNK2 and BCAR1/p130cas. Interacts with BCAR1/p130cas via SH3 domains. Forms complexes with GRB2 and numerous receptor tyrosine kinases (RTK) including LTK, AXL or PDGFRL, in which GRB2 promotes RTK recruitment by TNK2.

Similarity: The EBD (EGFR-binding domain) domain is necessary for interaction with EGFR. The SAM-like domain is necessary for NEDD4-mediated ubiquitination. Promotes membrane localization and dimerization to allow for autophosphorylation. The UBA domain binds both poly- and mono-ubiquitin. Belongs to the protein kinase superfamily. Tyr protein kinase family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	58331191
NCBI GeneID	10188
NCBI Accession #	NP_001010938.1
NCBI GenBank Nucleotide #	NP_001010938.1
UniProt Accession #	Q07912
Molecular Weight	Observed: 114 kDa Predicted: 115 kDa
NCBI Official Full Name	activated CDC42 kinase 1 isoform 2
NCBI Official Synonym Full Names	tyrosine kinase non receptor 2

NCBI Official Symbol	TNK2
NCBI Official Synonym Symbols	ACK; ACK1; ACK-1; p21cdc42Hs
NCBI Protein Information	activated CDC42 kinase 1
UniProt Protein Name	Activated CDC42 kinase 1
UniProt Gene Name	TNK2
UniProt Synonym Gene Names	ACK1; ACK-1
UniProt Entry Name	ACK1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/ack1-antibody-peptide-elisa-immunohistochemistry-western-blot-elisa/328491>