abcam

Product datasheet

Anti-ACK1 antibody ab65108

★☆☆☆☆ **1 Abreviews**   **3 References**   2 Images

Overview

Product name	Anti-ACK1 antibody
Description	Rabbit polyclonal to ACK1
Host species	Rabbit
Tested applications	**Suitable for:** ICC/IF, WB
Species reactivity	**Reacts with:** Rat, Human
	Predicted to work with: Mouse, Cow, Dog, Rhesus monkey ⚠
Immunogen	Synthetic peptide conjugated to KLH derived from within residues 1000 to the C-terminus of Human ACK1.Read Abcam's proprietary immunogen policy(Peptide available as **ab74487**.)
Positive control	This antibody gave a positive signal in the following Whole Cell Lysates: HeLa, HepG2, PC12, SHSY-5Y, T24/83, HT 1080
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.
	If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
Purity	Immunogen affinity purified

	Clonality	Polyclonal
	Isotype	IgG

Applications
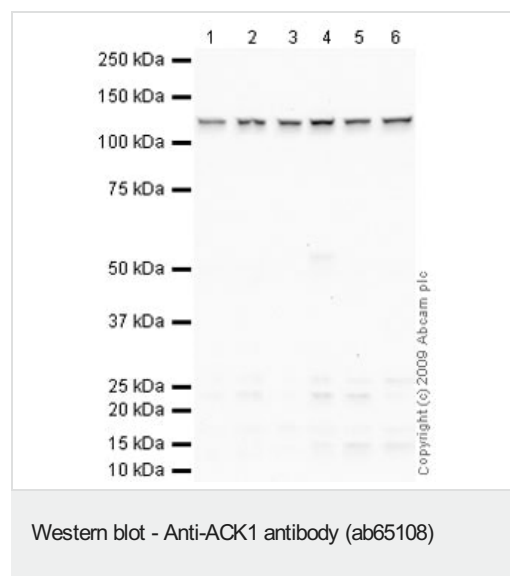
Our **Abpromise guarantee** covers the use of ab65108 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	★☆☆☆☆ (1)	Use a concentration of 1 µg/ml.
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 120 kDa (predicted molecular weight: 114 kDa).

Target

Function		Non-receptor tyrosine kinase that regulates the activity of a number of proteins by tyrosine phosphorylation especially proteins critical for cell survival, cell growth, and proliferation. Activates AKT1 by phosphorylating it on 'Tyr-176' resulting in its activation. Phosphorylates AR on 'Tyr-267' and 'Tyr-363' and promotes its recruitment to the androgen-responsive enhancers (AREs). Phosphorylates WWOX on 'Tyr-287'. Downstream effector of CDC42 which mediates CDC42-dependent cell migration via phosphorylation of BCAR1. Binds to both poly- and mono-ubiquitin and regulates ligand-induced degradation of EGFR. Participates in clathrin-mediated endocytosis. May be involved both in adult synaptic function and plasticity and in brain development.
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.
Sequence similarities		Belongs to the protein kinase superfamily. Tyr protein kinase family. Contains 1 CRIB domain. Contains 1 protein kinase domain. Contains 1 SH3 domain. Contains 1 UBA domain.
Domain		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.
Post-translational modifications		Autophosphorylation regulates kinase activity. Phosphorylation on Tyr-518 is required for interaction with SRC. Ubiquitinated by NEDD4. Its EGF-induced degradation is EGFR activation-dependent and is processed by lysosomes, not proteasomes.
Cellular localization		Cell membrane. Nucleus. Endosome. Cell junction > adherens junction. Cytoplasmic vesicle membrane. The Tyr-284 phosphorylated form is expressed both in the membrane and nucleus. Co-localizes with EGFR on the endosomes.

Images

Western blot - Anti-ACK1 antibody (ab65108)

All lanes : Anti-ACK1 antibody (ab65108) at 1 µg/ml

Lane 1 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 2 : HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate

Lane 3 : PC12 (Rat adrenal pheochromocytoma cell line) Whole Cell Lysate

Lane 4 : SHSY-5Y (Human neuroblastoma cell line) Whole Cell Lysate

Lane 5 : T24/83 (Human bladder carcinoma) Whole Cell Lysate

Lane 6 : HT 1080 (Human fibrosarcoma) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary

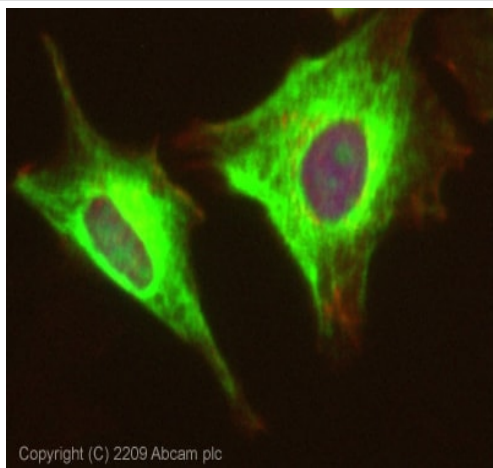**All lanes :** Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 114 kDa
Observed band size: 120 kDa

Exposure time: 4 minutes

Immunocytochemistry/ Immunofluorescence - Anti-ACK1 antibody (ab65108)

ICC/IF image of ab65108 stained HeLa cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab65108, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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