ACK (A-11): sc-28336

**BACKGROUND**

The Ras-related Rho subfamily of GTP-binding proteins (p21s), which includes Rhos, Rac and Cdc42Hs, is implicated in different aspects of cytoskeletal organization. These proteins resemble Ras p21 in that their active GTP-bound form is inactivated by intrinsic hydrolysis of the GTP to GDP, which can be stimulated by GTPase-activating proteins (GAPs). ACK, a tyrosine kinase that specifically binds Cdc42Hs in its GTP-bound form, has been described. This binding is mediated by a unique sequence of 47 amino acids C-terminal to an SH3 domain and inhibits both the intrinsic and GAP-stimulated GTPase activity of Cdc42Hs. These findings suggest that ACK may represent a new class of proteins that sustains the GTP-bound active form of the Rho subfamily of GTP binding proteins and which is directly linked to a tyrosine phosphorylation pathway.

**CHROMOSOMAL LOCATION**

Genetic locus: TNK2 (human) mapping to 3q29; Tnk2 (mouse) mapping to 16 B3.

**SOURCE**

ACK (A-11) is a mouse monoclonal antibody raised against amino acids 920-1036 mapping at the C-terminus of ACK of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2b kappa light chain in 1 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ACK (A-11) is available conjugated to agarose (sc-28336 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-28336 HRP), 200 µg/ml, for WB, HICP and ELISA; to either phycoerythrin (sc-28336 PE), fluorescein (sc-28336 FITC), Alexa Fluor® 488 (sc-28336 AF488), Alexa Fluor® 546 (sc-28336 AF546), Alexa Fluor® 594 (sc-28336 AF594) or Alexa Fluor® 647 (sc-28336 AF647), 200 µg/ml, for WB (RGB), IF, HICP and FCM; and to either Alexa Fluor® 680 (sc-28336 AF680) or Alexa Fluor® 790 (sc-28336 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

ACK (A-11) is recommended for detection of ACK of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of ACK: 60/115/119 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, HT-1080 whole cell lysate: sc-364183 or K-562 whole cell lysate: sc-2203.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

![Image of Western Blot Analysis]

ACK (A-11) HRP: sc-28336 HRP. Direct western blot analysis of ACK expression in MM-142 (A), EOC 20 (B), HT-1080 (C), HeLa (D) and K-562 (E) whole cell lysates.

ACK (A-11) sc-28336. Western blot analysis of ACK expression in K-562 (A), HT-1080 (B) and H4 (C) whole cell lysates. Detection reagent used: m-Ab1053 VP-HRP: sc-542741.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.