

PRKAB1 Antibody

Catalog No: #34258

Package Size: #34258-1 50ul #34258-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

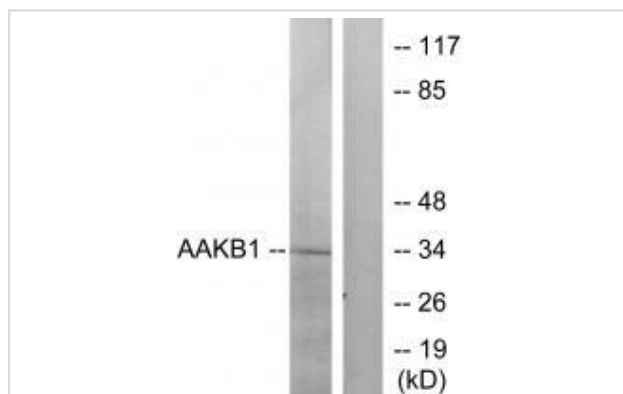
Description

Product Name	PRKAB1 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous levels of total PRKAB1 protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from N-terminal of human PRKAB1.
Target Name	PRKAB1
Other Names	5'-AMP-activated protein kinase subunit beta-1; AMPK beta-1 chain; AMPKb; PRKAB1; AMPK
Accession No.	Swiss-Prot: Q9Y478NCBI Gene ID: 5564
Uniprot	Q9Y478
GeneID	5564;
SDS-PAGE MW	34kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

Western blotting: 1:500~1:3000

Images



Western blot analysis of extracts from RAW264.7 cells, treated with TNF (20ng/ml, 5mins), using PRKAB1 antibody #34258.

Background

Non-catalytic subunit of AMP-activated protein kinase (AMPK), an energy sensor protein kinase that plays a key role in regulating cellular energy metabolism. In response to reduction of intracellular ATP levels, AMPK activates energy-producing pathways and inhibits energy-consuming processes: inhibits protein, carbohydrate and lipid biosynthesis, as well as cell growth and proliferation. AMPK acts via direct phosphorylation of metabolic enzymes, and by longer-term effects via phosphorylation of transcription regulators. Also acts as a regulator of cellular polarity by remodeling the actin cytoskeleton; probably by indirectly activating myosin. Beta non-catalytic subunit acts as a scaffold on which the AMPK complex assembles, via its C-terminus that bridges alpha (PRKAA1 or PRKAA2) and gamma subunits (PRKAG1, PRKAG2 or PRKAG3).

Stapleton D., FEBS Lett. 409:452-456(1997).

Scherer S.E., Nature 440:346-351(2006).

The MGC Project Team, Genome Res. 14:2121-2127(2004).

Note: This product is for in vitro research use only