Product Datasheet

Phospho-AMPK alpha 2(S345) Rabbit mAb

Catalog No: #13424

Package Size: #13424-1 50ul #13424-2 100ul

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

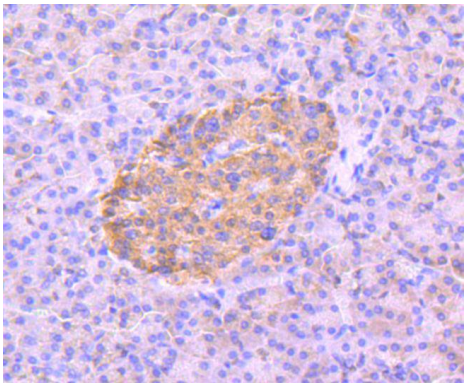
Description

Product Name	Phospho-AMPK alpha 2(S345) Rabbit mAb
Host Species	Rabbit
Clonality	Monoclonal
Clone No.	JJ08-19
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	Synthetic phospho-peptide corresponding to residues surrounding Ser345 of human AMPK alpha 2.
Other Names	5'-AMP-activated protein kinase catalytic subunit alpha-2 antibody AAPK2_HUMAN antibody ACACA kinase antibody Acetyl-CoA carboxylase kinase antibody AMPK alpha 2 chain antibody AMPK subunit alpha-2 antibody AMPK2 antibody AMPKa2 antibody AMPKalpha2 antibody HMGCR kinase antibody Hydroxymethylglutaryl-CoA reductase kinase antibody PRKAA antibody PRKAA2 antibody Protein kinase AMP activated alpha 2 catalytic subunit antibody Protein kinase AMP activated catalytic subunit alpha 2 antibody
Accession No.	Swiss-Prot#:P54646
Uniprot	P54646
GeneID	5563;
Calculated MW	62 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

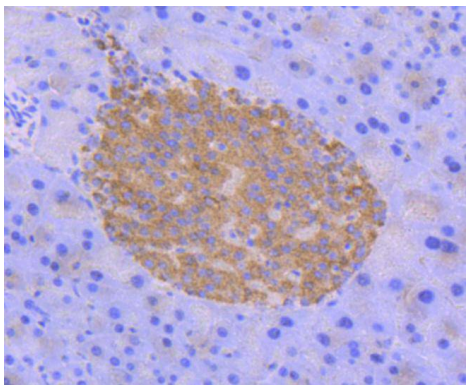
Application Details

WB: 1:500-1:1,000 IHC: 1:50-1:100ICC: 1:50-1:200

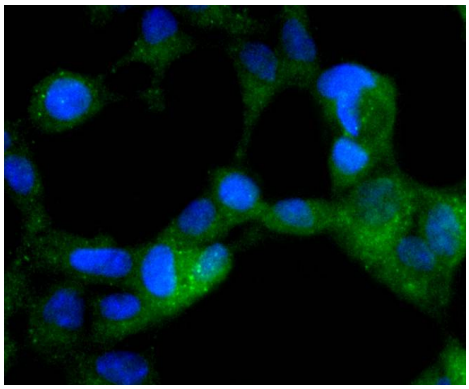
Images



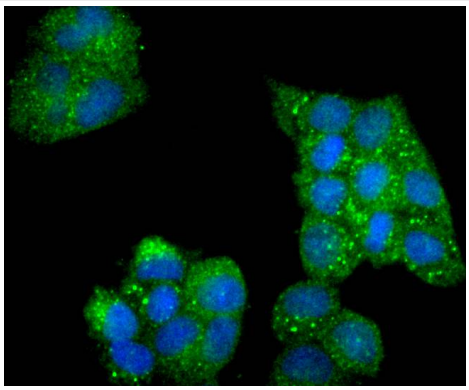
Immunohistochemical analysis of paraffin-embedded human pancreas tissue using anti-Phospho-AMPK alpha 2(S345) antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded mouse pancreas tissue using anti-Phospho-AMPK alpha 2(S345) antibody. Counter stained with hematoxylin.



ICC staining Phospho-AMPK alpha 2(S345) in 293 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining Phospho-AMPK alpha 2(S345) in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

Background

Five-prime-AMP-activated protein kinase, known as AMPK, is a heterotrimeric complex that comprises of a catalytic α subunit, and regulatory β and γ. AMPK protects cells from stresses that cause ATP depletion by switching off ATP-consuming biosynthetic pathways. AMPK is activated by high AMP and low ATP via a mechanism involving allosteric regulation, promotion of phosphorylation by an upstream protein kinase known as AMPK kinase (AMPKK), and inhibition of dephosphorylation. Activated AMPK can phosphorylate and regulate in vivo hydroxymethylglutaryl-CoA reductase and acetyl-CoA carboxylase, which are key regulatory enzymes of sterol synthesis and fatty acid synthesis, respectively. The human AMPKα1 gene maps to chromosome 5p12 and encodes a 548 amino acid protein. The major regulatory site phosphorylated by AMPKK on AMPKα has been identified as Thr 172 within the activation loop between the DFG and APE motifs of the alpha-subunits.

References

Note: This product is for in vitro research use only