

AMPK α 1 polyclonal antibody

Catalog: BS90052

Host: Rabbit

Reactivity: Human, Mouse, Rat

BackGround:

AMPK (for 5'-AMP-activated protein kinase) is a heterotrimeric complex comprising a catalytic α subunit and regulatory β and γ subunits. It protects cells from stresses that cause ATP depletion by switching off ATP-consuming bio-synthetic pathways. AMPK is activated by high AMP and low ATP through a mechanism involving allosteric regulation, promotion of phosphorylation by an upstream protein kinase known as AMPK kinase, and inhibition of dephosphorylation. Activated AMPK can phosphorylate and regulate in vivo hydroxy-methylglutaryl-CoA reductase and acetyl-CoA carboxylase, which are key regulatory enzymes of sterol synthesis and fatty acid synthesis, respectively. The human AMPK α 1 and AMPK α 2 genes encode 548 amino acid and 552 amino acid proteins, respectively. Human AMPK β 1 encodes a 271 amino acid protein and human AMPK β 2 encodes a 272 amino acid protein. The human AMPK γ 1 gene encodes a 331 amino acid protein. Human AMPK γ 2 and AMPK γ 3, which are 569 and 492 amino acid proteins, respectively, contain unique N-terminal domains and may participate directly in the binding of AMP within the AMPK complex.

Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

Molecular Weight:

63 kDa

Swiss-Prot:

Q13131(Human) Q5EG47(Mouse) P54645(Rat)

Purification&Purity:

ProA affinity purified

Applications:

WB:1:1,000-1:5,000

ICC:1:50-1:200

FC:1:50-1:100

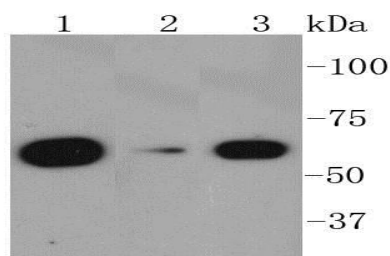
Storage&Stability:

Store at +4 °C after thawing. Aliquot store at -20 °C or -80 °C. Avoid repeated freeze / thaw cycles.

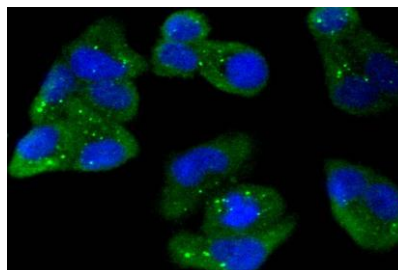
Specificity:

AMPK α 1 polyclonal antibody detects endogenous levels of AMPK α 1 protein.

DATA:



Western blot analysis of AMPK alpha 1 on different lysates using anti-AMPK alpha 1 antibody at 1/1,000 dilution. Positive control: Lane 1: HeLa Lane 2: HepG2 Lane 3: MCF-7



ICC staining AMPK alpha 1 in HeLa cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

Note:

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

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