Product datasheet

Anti-AMPK alpha 1 (phospho S487) antibody ab131357

Overview

Product name
Anti-AMPK alpha 1 (phospho S487) antibody

Description
Rabbit polyclonal to AMPK alpha 1 (phospho S487)

Host species
Rabbit

Tested applications
Suitable for: WB, IHC-P, ICC/IF

Species reactivity
Reacts with: Human

Predicted to work with: Mouse, Rat

Immunogen
Synthetic peptide conjugated to KLH, surrounding phosphorylation site of serine 487 (S-G-S(p)-V-S) derived from Human AMPK alpha 1 (NP_006242.5).

Positive control
HUVEC cell extract treated with UV, HeLa cells, Human colon carcinoma tissue

Properties

Form
Liquid

Storage instructions
Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

Storage buffer
pH: 7.40
Preservative: 0.02% Sodium azide
Constituents: 49% PBS, 50% Glycerol, 0.88% Sodium chloride

Purity
Immunogen affinity purified

Purification notes
Antibody was purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.

Clonality
Polyclonal

Isotype
IgG

Applications

Our Abpromise guarantee covers the use of ab131357 in the following tested applications.
Function

Responsible for the regulation of fatty acid synthesis by phosphorylation of acetyl-CoA carboxylase. It also regulates cholesterol synthesis via phosphorylation and inactivation of hormone-sensitive lipase and hydroxymethylglutaryl-CoA reductase. Appears to act as a metabolic stress-sensing protein kinase switching off biosynthetic pathways when cellular ATP levels are depleted and when 5'-AMP rises in response to fuel limitation and/or hypoxia. This is a catalytic subunit.

Sequence similarities

Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. SNF1 subfamily. Contains 1 protein kinase domain.

Images

**Western blot** - Anti-AMPK alpha 1 (phospho S487) antibody (ab131357)

*All lanes* : Anti-AMPK alpha 1 (phospho S487) antibody (ab131357) at 1/500 dilution

*Lane 1* : HUVEC cell extract untreated

*Lane 2* : HUVEC cell extract treated with UV

**Predicted band size**: 64 kDa

**Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)** - Anti-AMPK alpha 1 (phospho S487) antibody (ab131357)

Immunohistochemical analysis of paraffin embedded Human colon carcinoma tissue labelling AMPK alpha 1 (phospho S487) with ab131357 antibody at a dilution of 1/50. Picture on the right was preincubated with blocking peptide.
Immunofluorescence of methanol-fixed HeLa cells staining AMPK alpha 1 (phospho S487) with ab131357 antibody at a dilution of 1/100.

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