

35-1165: AMPK Alpha1 (Phospho-Ser487) Polyclonal Antibody

Clonality :	Polyclonal
Application :	WB,IHC,IF
Reactivity :	Human
Gene :	PRKAA1
Gene ID :	5562
Uniprot ID :	Q13131/P54646
Format :	Purified
Alternative Name :	AAPK1, AMPK alpha-1 chain, AMPK-alpha1, HMG-CoA reductase kinase, PRKAA1
Isotype :	Rabbit IgG
Immunogen Information :	Peptide sequence around phosphorylation site of serine 496 (S-G- S(P)-V-S) derived from Human AMPK β 1.

Description

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. Kim JE, et al. (2005) J Proteome Res. 4(4): 1339-1346. Woods A, et al. (2003) J Biol Chem. 278(31): 28434-28442.

Product Info

Amount :	50 μ l / 100 μ l
Content :	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage condition :	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

Predicted MW: 63kd, Western blotting: 1:500~1:1000, Immunohistochemistry: 1:50~1:100, Immunofluorescence: 1:100~1:200

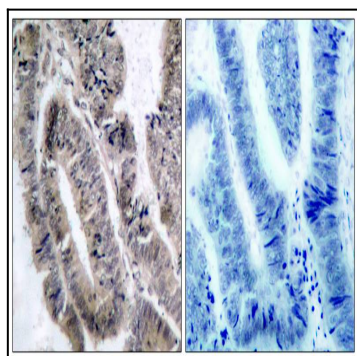


Figure 1: Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue using AMPK α 1 (Phospho-Ser496)Antibody 35-1165 (left) or the same antibody preincubated with blocking peptide (right).

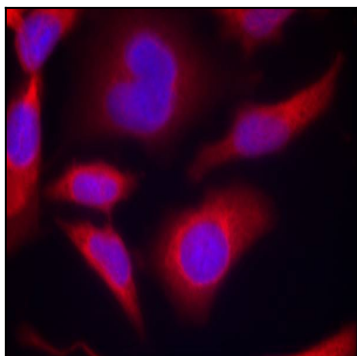


Figure 2: Immunofluorescence staining of methanol-fixed HeLa cells using AMPKa1(Phospho-Ser496)Antibody 35-1165 .

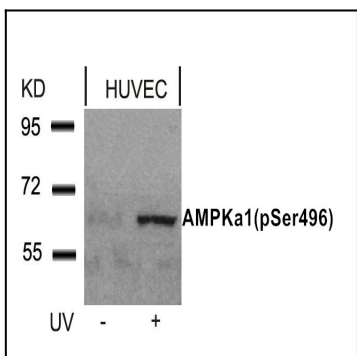


Figure 3: Western blot analysis of extracts from HUVEC cells untreated or treated with UV using AMPKa1 (Phospho-Ser496)Antibody 35-1165 .

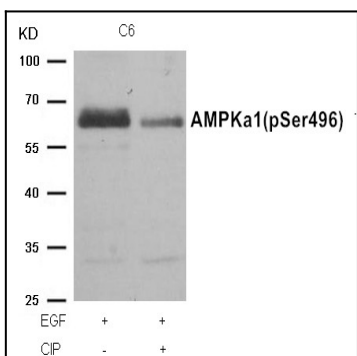


Figure 4: Western blot analysis of extracts from C6 cells, treated with EGF or calf intestinal phosphatase (CIP), using AMPKa1 (Phospho-Ser496) Antibody 35-1165 .