

PRODUCT DATA SHEET

Bioworld Technology, Inc.

AMPKα2 (Phospho-S345) polyclonal antibody

Catalog: BS94020 Host: Rabbit Reactivity: Human, Mouse, Rat

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 AMPKa1 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.

Product:

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

Molecular Weight:

62 kDa

Swiss-Prot:

P54646(Human) Q8BRK8(Mouse) Q09137(Rat)

Purification&Purity:

ProA affinity purified

Applications:

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

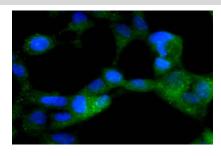
Storage&Stability:

Store at +4 $^{\circ}$ C after thawing. Aliquot store at -20 $^{\circ}$ C or -80 $^{\circ}$ C. Avoid repeated freeze / thaw cycles.

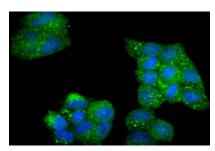
Specificity:

AMPK α 2 (Phospho-S345) polyclonal antibody detects endogenous levels of AMPK α 2 protein only when phosphorylated at S345.

DATA:



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.

Note:

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

Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park,

MN 55416,USA.

Email: <u>info@bioworlde.com</u>

Tel: 6123263284 Fax: 6122933841 Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046,

P. R. China.

Email: info@biogot.com
Tel: 0086-025-68037686
Fax: 0086-025-68035151