

# PRODUCT DATA SHEET

Bioworld Technology,Inc.

# AMPKα1/2 (phospho-T183/172) polyclonal antibody

Catalog: BS5003 Host: Rabbit Reactivity: Human, Mouse, Rat

#### **BackGround:**

AMPK is a heterotrimeric complex comprising a catalytic  $\alpha$  subunit and regulatory  $\beta$  and  $\gamma$  subunits. It protects cells from stresses that cause ATP depletion by switching off ATP-consuming biosynthetic 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 hydroxymethylglutaryl-CoA reductase and acetyl-CoA carboxylase, which are key regulatory enzymes of sterol synthesis and fatty acid synthesis, respectively. The human AMPK $\alpha$ 1 and AMPK $\alpha$ 2 genes encode 548 amino acid and 552 amino acid proteins, respectively.

#### **Product:**

1 mg/ml in Phosphate buffered saline (PBS) with 0.05% sodium azide, approx. pH 7.2.

# **Molecular Weight:**

~ 63 kDa

#### **Swiss-Prot:**

Q13131/P54646

# **Purification&Purity:**

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

#### **Applications:**

# IHC: 1:50~1:200 Storage&Stability:

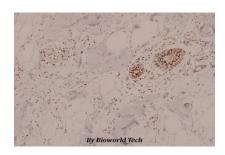
WB: 1:500~1:1000

Store at  $4\,\mathrm{C}$  short term. Aliquot and store at -20  $\mathrm{C}$  long term. Avoid freeze-thaw cycles.

### **Specificity:**

p-AMPK $\alpha$ 1/2 (T183/172) polyclonal antibody detects endogenous levels of AMPK $\alpha$ 1 protein only when phosphorylated at Thr183 and AMPK $\alpha$ 2 protein only when phosphorylated at Thr172.

# **DATA:**



Immunohistochemistry (IHC) analyzes of p-AMPK $\alpha$ 1/2 (T183/172) pAb in paraffin-embedded human breast carcinoma tissue at 1:100.

#### 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: <a href="mailto:info@biogot.com">info@biogot.com</a>
Tel: 0086-025-68037686
Fax: 0086-025-68035151