

Human Phospho-AMPKα1/2 (T183/T172) Antibody

Antigen Affinity-purified Polyclonal Rabbit IgG Catalog Number: AF2509

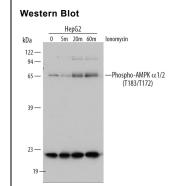
| DESCRIPTION | | | |
|--------------------|--|--|--|
| Species Reactivity | Human | | |
| Specificity | Detects human AMPKα1 and AMPKα2 when phosphorylated at T183 and T172, respectively, in Western blots. | | |
| Source | Polyclonal Rabbit IgG | | |
| Purification | Antigen and protein A Affinity-purified | | |
| Immunogen | Phosphopeptide containing human AMPKα1 T183 site | | |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. | | |

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

| | Recommended Concentration | Sample |
|--------------|------------------------------|-----------|
| Western Blot | 1 μg/mL | See Below |

DATA



Detection of Human Phospho-AMPKα1/2 (T183/T172) by Western Blot.

Western blot shows lysates of HepG2 human hepatocellular carcinoma cell line treated with 1 μM ionomycin for the indicated times in minutes. PVDF membrane was probed with 1 μg/mL of Rabbit Anti-Human Phospho-AMPKα1/2 (T183/T172) Antigen Affinity-purified Polyclonal Antibody, followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF-008). A specific band was detected for Phospho-AMPKα1/2 (T183/T172) at approximately 63 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 0.2 mg/mL in sterile PBS.

ShippingThe product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

 * Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 $^\circ$ C

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

AMP-activated protein kinase (AMPK) is a heterotrimeric complex consisting of a catalytic α subunit and regulatory β and δ subunits. The α subunit of AMPK is activated allosterically by AMP, and by phosphorylation via the AMPK kinase LKB1. Active AMPK down-regulates anabolic pathways such as fatty acid and cholesterol synthesis, and up-regulates catabolic pathways such as glycolysis and fatty acid oxidation.