

Phospho-AMPK alpha1/2 (Thr183/172) Polyclonal Antibody

catalog number: E-AB-21121

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

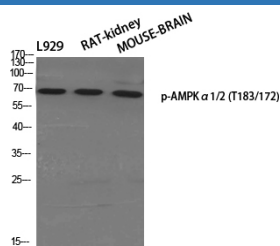
Reactivity	Human;Mouse;Rat;Monkey
Immunogen	Synthesized peptide derived from human AMPK α 1/2 around the phosphorylation site of Thr183/172
Host	Rabbit
Isotype	IgG
Purification	Affinity purification
Conjugation	Unconjugated
Buffer	Phosphate buffered solution, pH 7.4, containing 0.05% stabilizer, 0.5% protein protectant and 50% glycerol.

Applications

Recommended Dilution

WB	1:500-1:2000
IHC	1:100-1:300
IF	1:50-1:200

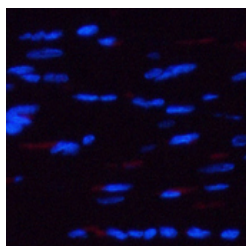
Data



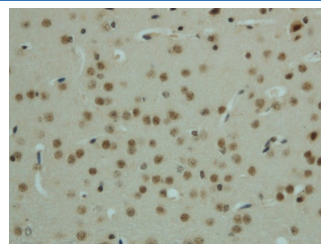
Western Blot analysis of various cells using Phospho-AMPK alpha1/2 (Thr183/172) Polyclonal Antibody at dilution of 1:500

Observed-MW:63 kDa

Calculated-MW:62 kDa



Immunofluorescence analysis of Rat heart tissue using Phospho-AMPK alpha1/2 (Thr183/172) Polyclonal Antibody at dilution of 1:200



Immunohistochemistry of paraffin-embedded mouse brain using Phospho-AMPK alpha1/2 (Thr183/172) Polyclonal Antibody at dilution of 1:50

Preparation & Storage

Storage	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack, upon receipt, store it immediately at the temperature recommended.

For Research Use Only

Background

AMPK (for 5'-AMP-activated protein kinase) is a heterotrimeric complex comprising a catalytic α subunit and regulatory β and γ 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.