## For Research Use Only

## AMPK Gamma 1 Monoclonal antibody

Catalog Number:67182-1-lg Featured Product



**Basic Information** 

Catalog Number: GenBank Accession Number:

67182-1-lg BC000358 GeneID (NCBI): 150ul, Concentration: 1000 ug/ml by 5571

Bradford method using BSA as the **UNIPROT ID:** standard; P54619 Source:

Mouse protein kinase, AMP-activated, Isotype: gamma 1 non-catalytic subunit

lgG1 Calculated MW: Immunogen Catalog Number: 38 kDa AG28907 Observed MW:

36-38 kDa

Full Name:

**Applications** 

**Tested Applications:** 

Species Specificity: Human, mouse, rat

Positive Controls:

WB: HeLa cells, HEK-293 cells, HepG2 cells, Jurkat cells, K-562 cells, HSC-T6 cells, PC-12 cells, NIH/3T3

**Purification Method:** 

CloneNo.:

1E11D4

Protein G purification

Recommended Dilutions:

WB 1:5000-1:20000

cells. RAW 264.7 cells

## **Background Information**

Protein kinase, AMP-activated, gamma 1 non-catalytic subunit (PRKAG1, synonyms: AMPKG, MGC8666) is a regulatory subunit of the AMP-activated protein kinase (AMPK). AMPK is a heterotrimer consisting of an catalytic subunit, and non-catalytic and subunits. AMPK is an important energy-sensing enzyme that monitors cellular energy status. In response to cellular metabolic stresses, AMPK is activated, and thus phosphorylates and iAMP-activated protein kinase (AMPK) is a highly conserved heterotrimeric serine/threonine kinase widely characterised as a sensor of cellular energetic stress. AMPK is a heterotrimeric complex consisting of a catalytic a-subunit and two  $regulatory\ subunits\ (\beta\ and\ \gamma\ ).\ AMPK\ is\ an\ important\ energy-sensing\ enzyme\ that\ monitors\ cellular\ energy\ status.\ In$ response to cellular metabolic stresses, AMPK is activated, and thus phosphorylates and inactivates acetyl-CoA carboxylase (ACC) and beta-hydroxy beta-methylglutaryl-CoA reductase (HMGCR), key enzymes involved in regulating de novo biosynthesis of fatty acid and cholesterol. AMPK gamma 1 is one of the gamma regulatory subunits of AMPK.

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

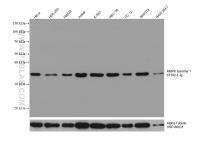
Storage Buffer:

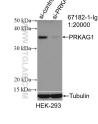
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

## Selected Validation Data





Various lysates were subjected to SDS PAGE followed by western blot with 67182-1-1g (AMPK gamma 1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Alpha Tubulin Monoclonal antibody (HRP-66031) as loading control.

WB result of AMPK Gamma 1 antibody (67182-1-lg; 1:20000; incubated at room temperature for 1.5 hours) with sh-Control and sh-AMPK Gamma 1 transfected HEK-293 cells.