

For Research Use Only

AMPK Alpha 1 Monoclonal antibody

Catalog Number: 66536-1-Ig

Featured Product

72 Publications



Basic Information

Catalog Number:

66536-1-Ig

Size:

150ul, Concentration: 1500 ug/ml by Nanodrop and 830 ug/ml by Bradford method using BSA as the standard;

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG24744

GenBank Accession Number:

BC012622

GeneID (NCBI):

5562

UNIPROT ID:

Q13131

Full Name:

protein kinase, AMP-activated, alpha 1 catalytic subunit

Calculated MW:

63 kDa

Observed MW:

64 kDa

Purification Method:

Protein A purification

CloneNo.:

1H8E1

Recommended Dilutions:

WB 1:500-1:3000

IHC 1:50-1:500

Applications

Tested Applications:

WB, IHC, ELISA

Cited Applications:

WB, IHC, CoIP

Species Specificity:

Human, Rat, Mouse

Cited Species:

human, mouse, rat, pig, hamster, goat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : HeLa cells, Jurkat cells, HSC-T6 cells, NIH/3T3 cells, HEK-293 cells, A549 cells, HepG2 cells, K-562 cells, PC-12 cells, L02 cells, HT-29 cells, THP-1 cells, 4T1 cells, MCF-7 cells

IHC : human breast cancer tissue, human prostate cancer tissue

Background Information

The mammalian 5-prime-AMP-activated protein kinase (AMPK) appears to play a role in protecting cells from stresses that cause ATP depletion by switching off ATP-consuming biosynthetic pathways. PRKAA1 is also named as AMPK1, ACACA kinase, HMGCR kinase. It is a mammalian homologue of sucrose non-fermenting protein kinase (SNF-1), which belongs to a serine/threonine protein kinase family. It has 2 isoforms with molecular mass of 63-66 kDa produced by alternative splicing.

Notable Publications

| Author | Pubmed ID | Journal | Application |
|--------------|-----------|-----------------|-------------|
| Jiarui Fang | 36102200 | Mol Carcinog | WB |
| Zimengwei Ye | 36160420 | Front Pharmacol | WB |
| Yaoyao Xia | 31670355 | Food Funct | WB |

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

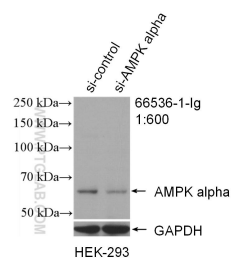
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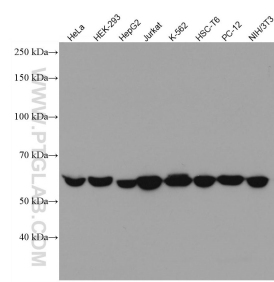
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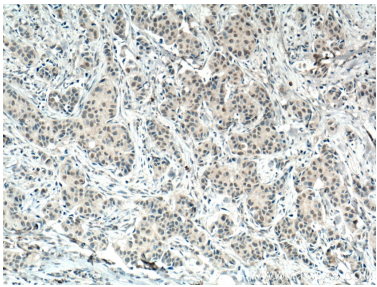
Selected Validation Data



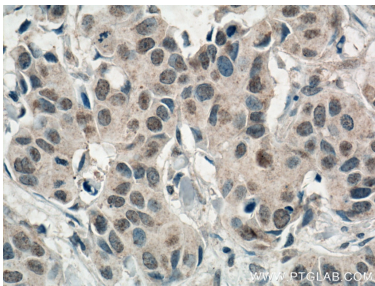
WB result of AMPK alpha antibody (66536-1-Ig; 1:600; incubated at room temperature for 1.5 hours) with sh-Control and sh-AMPK alpha transfected HEK-293 cells.



Various lysates were subjected to SDS PAGE followed by western blot with 66536-1-Ig (AMPK alpha antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66536-1-Ig (AMPK alpha antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66536-1-Ig (AMPK alpha antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).