

## Rabbit anti-Human, Mouse AMPK alpha 1 Polyclonal Antibody | anti-AMPKalpha1 antibody

Rabbit anti-AMPK alpha 1 Antibody, Affinity Purified

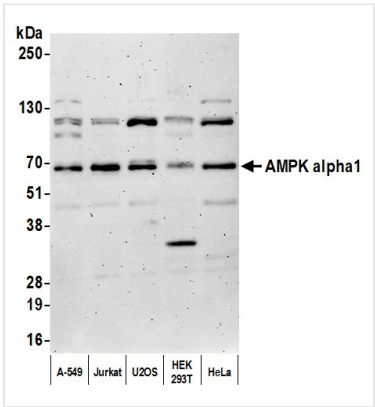
| CATALOG # | HOST   | REACTIVITY   | APPLICATIONS                                            |
|-----------|--------|--------------|---------------------------------------------------------|
| AAA210989 | Rabbit | Human, Mouse | Immunohistochemistry, Immunoprecipitation, Western Blot |

### PRODUCT SYNONYMS

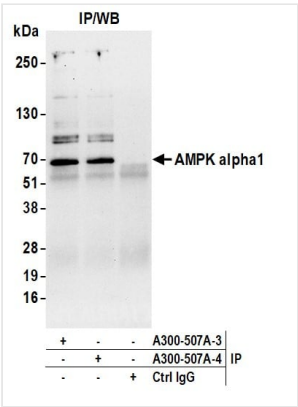
AMPK alpha 1; Polyclonal Antibody; Rabbit anti-AMPK alpha 1 Antibody; Affinity Purified; AMP-activate kinase alpha 1 subunit; AMPK subunit alpha-1; tau-protein kinase PRKAA1; protein kinase; AMP-activated; alpha 1 catalytic subunit; hydroxymethylglutaryl-CoA reductase kinase; HMGCR kinase; AMPKa1; AMP-activated protein kinase; catalytic; alpha-1; acetyl-CoA carboxylase kinase; ACACA kinase; 5'-AMP-activated protein kinase; catalytic alpha-1 chain; 5'-AMP-activated protein kinase catalytic subunit alpha-1; AMPK; protein kinase AMP-activated catalytic subunit alpha 1; anti-AMPKalpha1 antibody

### PRODUCT SPECIFICATIONS

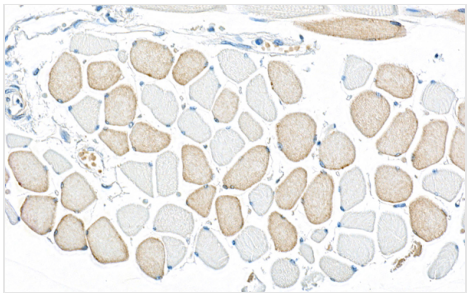
|                                                      |                                                                                           |
|------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Host                                                 | Rabbit                                                                                    |
| Reactivity                                           | Human, Mouse                                                                              |
| Clonality                                            | Polyclonal                                                                                |
| Purity/Purification                                  | Antigen Affinity Purified                                                                 |
| Form/Format                                          | Liquid. Whole IgG. Tris-citrate/phosphate buffer, pH 7 to 8 containing 0.09% Sodium Azide |
| Concentration                                        | 1000ug/ml (varies by lot)                                                                 |
| Applicable Applications for anti-AMPKalpha1 antibody | IHC (Immunohistochemistry), IP (Immunoprecipitation), WB (Western Blot)                   |
| Predicted Reactivity                                 | Rat, Orangutan                                                                            |
| Immunogen                                            | Between 375 and 425                                                                       |
| Conjugation                                          | Unconjugated                                                                              |
| Preparation and Storage                              | Store at 2-8 degree C<br>Shelf Life: 1 year from date of receipt                          |



**WB (Western Blot)**  
Detection of human AMPK alpha1 by western blot. Samples: Whole cell lysate (10 ug) from A-549, Jurkat, U2OS, HEK293T, and HeLa cells prepared using NETN lysis buffer. Antibody: Affinity purified rabbit anti-AMPK alpha1 antibody (AAA210989 lot 4) used for WB at 0.04 ug/ml. Detection: Chemiluminescence with an exposure time of 3 minutes.



**IP (Immunoprecipitation)**  
Detection of human AMPK alpha1 by western blot of immunoprecipitates. Samples: Whole cell lysate (1.0 mg per IP reaction; 20% of IP loaded) from HEK293T cells prepared using NETN lysis buffer. Antibodies: Affinity purified rabbit anti-AMPK alpha1 antibody (AAA210989 lot 4) used for IP at 6 ug per reaction. AMPK alpha1 was also immunoprecipitated by a previous lot of this antibody (AAA210989 lot 3). For blotting immunoprecipitated AMPK alpha1, AAA210989 was used at 0.1 ug/ml. Detection: Chemiluminescence with an exposure time of 10 seconds.



**IHC (Immunohistochemistry)**  
Detection of human AMPK alpha 1 by immunohistochemistry. Sample: FFPE section of human skeletal muscle. Antibody: Affinity purified rabbit anti-AMPK alpha 1 (AAA210989 Lot 4) used at a dilution of 1:1,000 (1ug/ml). Detection: DAB

ADDITIONAL INFORMATION

|                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-AMPKalpha1 antibody | AMP-activated protein kinase (AMPK) is a heterotrimeric protein made up of a catalytic alpha subunit, and a regulatory beta and gamma subunit. There are two distinct genes for the alpha subunit, alpha1 and alpha2. AMPK alpha 1 is the serine/threonine kinase catalytic subunit of the AMPK. AMPK is responsible for regulating fatty acid and cholesterol synthesis. AMPK is activated in response to a wide variety of metabolic stresses and switches off anabolic pathways when ATP levels are depleted. |
| Product Categories/Family for anti-AMPKalpha1 antibody   | Primary Antibodies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

NCBI AND UNIPROT INFORMATION

|                           |                                                        |
|---------------------------|--------------------------------------------------------|
| NCBI GI #                 | 94557301                                               |
| NCBI GeneID               | 5562                                                   |
| NCBI Accession #          | NP_006242.5                                            |
| NCBI GenBank Nucleotide # | NM_006251.5                                            |
| UniProt Accession #       | Q13131; O00286; Q5D0E1; Q86VS1; Q9UNQ4; A8MTQ6; B2R7E1 |
| Molecular Weight          | 63kDa                                                  |

|                                  |                                                                                                                                                                                                                                                                |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI Official Full Name          | 5'-AMP-activated protein kinase catalytic subunit alpha-1 isoform 1                                                                                                                                                                                            |
| NCBI Official Synonym Full Names | protein kinase, AMP-activated, alpha 1 catalytic subunit                                                                                                                                                                                                       |
| NCBI Official Symbol             | PRKAA1                                                                                                                                                                                                                                                         |
| NCBI Official Synonym Symbols    | AMPK; AMPKa1                                                                                                                                                                                                                                                   |
| NCBI Protein Information         | 5'-AMP-activated protein kinase catalytic subunit alpha-1; ACACA kinase; AMPK alpha 1; HMGCR kinase; AMPK subunit alpha-1; tau-protein kinase PRKAA1; acetyl-CoA carboxylase kinase; AMP -activate kinase alpha 1 subunit; hydroxymethylglutaryl-CoA reductase |
| UniProt Protein Name             | 5'-AMP-activated protein kinase catalytic subunit alpha-1                                                                                                                                                                                                      |
| UniProt Gene Name                | <b>PRKAA1</b>                                                                                                                                                                                                                                                  |
| UniProt Synonym Gene Names       | AMPK1; AMPK subunit alpha-1; ACACA kinase; HMGCR kinase                                                                                                                                                                                                        |
| UniProt Entry Name               | AAPK1_HUMAN                                                                                                                                                                                                                                                    |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | [contact@aaabiotech.com](mailto:contact@aaabiotech.com)

Online datasheet: <https://www.aaabiotech.com/polyclonal/ampk-alpha-1-antibody-immunohistochemistry-immunoprecipitation-western-blot-elisa/210989>