

## ARG56343 anti-AMPK beta 2 antibody

Package: 100 μl Store at: -20°C

# Summary

| Product Description | Rabbit Polyclonal antibody recognizes AMPK beta 2                   |
|---------------------|---|
| Tested Reactivity   | Hu, Ms, Rat   |
| Tested Application  | ICC/IF, WB  |
| Host                | Rabbit  |
| Clonality           | Polyclonal  |
| Isotype             | IgG   |
| Target Name         | AMPK beta 2   |
| Species             | Human   |
| Immunogen           | Recombinant protein of Human AMPK beta 2                            |
| Conjugation         | Un-conjugated   |
| Alternate Names     | 5'-AMP-activated protein kinase subunit beta-2; AMPK subunit beta-2 |

### **Application Instructions**

| Application table | Application  | Dilution       |
|-------------------|--|----------------|
|                   | ICC/IF   | 1:50 - 1:200   |
|                   | WB   | 1:500 - 1:2000 |
| Application Note  | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. |                |
| Positive Control  | MCF7   |                |

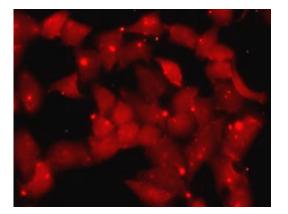
## Properties

| Form                | Liquid  |
|---------------------|---|
| Purification        | Affinity purification with immunogen.   |
| Buffer              | PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.  |
| Preservative        | 0.02% Sodium azide  |
| Stabilizer          | 50% Glycerol  |
| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot<br>and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw<br>cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use. |
| Note                | For laboratory research only, not for drug, diagnostic or other use.  |

### Bioinformation

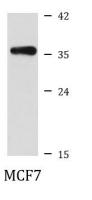
| Gene Symbol<br>Gene Full Name<br>Background<br>Function | PRKAB2<br>protein kinase, AMP-activated, beta 2 non-catalytic subunit<br>The protein encoded by this gene is a regulatory subunit of the AMP-activated protein kinase (AMPK).<br>AMPK is a heterotrimer consisting of an alpha catalytic subunit, and non-catalytic beta and gamma<br>subunits. AMPK is an important energy-sensing enzyme that monitors cellular energy status. In response<br>to cellular metabolic stresses, AMPK is activated, and thus phosphorylates and inactivates acetyl-COA<br>carboxylase (ACC) and beta-hydroxy beta-methylglutaryl-CoA reductase (HMGCR), key enzymes involved<br>in regulating de novo biosynthesis of fatty acid and cholesterol. This subunit may be a positive regulator<br>of AMPK activity. It is highly expressed in skeletal muscle and thus may have tissue-specific roles. Multiple<br>alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Jul 2013]<br>Non-catalytic subunit of AMP-activated protein kinase (AMPK), an energy sensor protein kinase that plays<br>a key role in regulating cellular energy metabolism. In response to reduction of intracellular ATP levels,<br>AMPK activates energy-producing pathways and inhibits energy-consuming processes: inhibits protein,<br>carbohydrate and lipid biosynthesis, as well as cell growth and proliferation. AMPK acts via direct<br>phosphorylation of metabolic enzymes, and by longer-term effects via phosphorylation of transcription<br>regulators. Also acts as a regulator of cellular polarity by remodeling the actin cytoskeleton; probably by<br>indirectly activating myosin. Beta non-catalytic subunit acts as a scaffold on which the AMPK complex<br>assembles, via its C-terminus that bridges alpha (PRKAA1 or PRKAA2) and gamma subunits (PRKAG1,<br>PRKAG2 or PRKAG3). [UniProt] |
|---|---|
| Calculated Mw<br>PTM                                    | 30 kDa<br>Phosphorylated when associated with the catalytic subunit (PRKAA1 or PRKAA2). Phosphorylated by ULK1<br>and ULK2; leading to negatively regulate AMPK activity and suggesting the existence of a regulatory<br>feedback loop between ULK1, ULK2 and AMPK.   |

#### Images



#### ARG56343 anti-AMPK beta 2 antibody ICC/IF image

Immunofluorescence: U2OS cells stained with ARG56343 anti-AMPK beta 2 antibody.



#### ARG56343 anti-AMPK beta 2 antibody WB image

Western blot: MCF7 cell lysate stained with ARG56343 anti-AMPK beta 2 antibody.