

## ARG30182 AMPK-ACC pathway Antibody Panel

Package: 1 kit  
Store at: -20°C

### Component

Cat. No.	Component Name	Host clonality	Reactivity	Application	Package
ARG51172	anti-AMPK alpha 1 / 2 antibody	Rabbit pAb	Hu, Ms, Rat	ICC/IF, IHC-P, WB	50 µl
ARG51678	anti-AMPK alpha 1 phospho (Thr183) + AMPK alpha 2 phospho (Thr172) antibody	Rabbit pAb	Hu, Ms, Rat	ICC/IF, IHC-P, WB	50 µl
ARG51853	anti-Acetyl CoA carboxylase 1 phospho (Ser79) antibody	Rabbit pAb	Hu	WB	50 µl
ARG65351	Goat anti-Rabbit IgG antibody (HRP)	Goat pAb	Rb	ELISA, IHC-P, WB	50 µl

### Summary

Product Description	<p>AMP-activated protein kinase (AMPK) responds to hormonal and nutrient signals in the central nervous system and peripheral tissues, modulating food intake and whole-body energy homeostasis. The kinase is activated by an elevated AMP/ATP ratio due to cellular and environmental stress, such as heat shock, hypoxia and ischemia. Phosphorylates AMPK<math>\alpha</math>1/2 at Thr172/Thr174 in the activation loop and this phosphorylation is required for AMPK activation. . In its activated state, AMPK phosphorylates serine residues 79, 1,200, and 1,215 of acetyl-coenzyme A carboxylase (ACC) which is reducing the activity of ACC. ACC is a potential target of anti-obesity drugs.</p> <p>Carling, D. (2004) Trends Biochem Sci 29, 18-24. Lizcano, J.M. et al. (2004) EMBO J 23, 833-43. Woods, A. et al. (2003) J Biol Chem 278, 28434-42. Levert, K.L. et al. (2002) J Biol Chem 277, 16347-50. Warden, S.M. et al. (2001) Biochem J 354, 275-83.</p>
Target Name	AMPK-ACC pathway
Alternate Names	AMPK-ACC pathway antibody; AMPK alpha 1/2 antibody; AMPK alpha 1/2 phospho (Thr183 / Thr172) antibody; Acetyl CoA carboxylase 1 phospho (Ser79) antibody

### Properties

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw 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

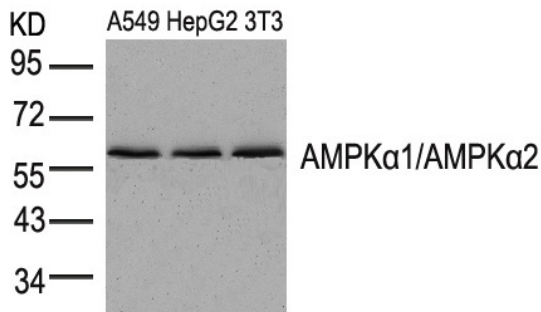
Gene Full Name

Antibody Panel for AMPK-ACC pathway

Research Area

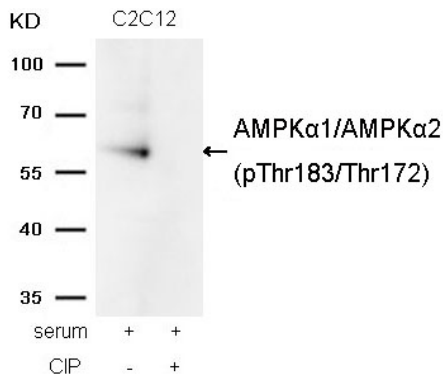
Cancer antibody; Cell Biology and Cellular Response antibody; Immune System antibody; Metabolism antibody; Neuroscience antibody; Signaling Transduction antibody

## Images



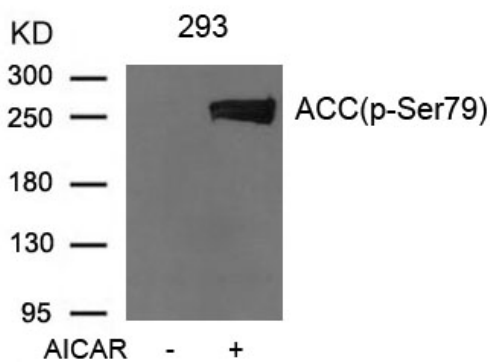
ARG51172 anti-AMPK alpha1/AMPK alpha2 antibody WB image

Western Blot: extracts from A549, HepG2 and 3T3 cells stained with anti-AMPK alpha1/AMPK alpha2 antibody ARG51172.



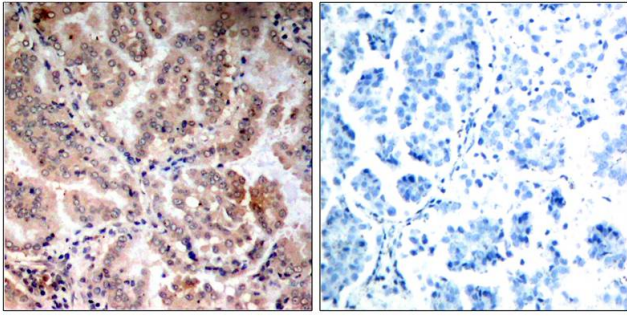
ARG51678 anti-AMPK alpha 1 / AMPK alpha 2phospho (Thr183/Thr172) antibody WB image

Western Blot: extracts from C2C12 cells, treated with serum or calf intestinal phosphatase (CIP), stained with anti-AMPK alpha 1 / AMPK alpha 2(phospho Thr174/Thr172) antibody ARG51678.



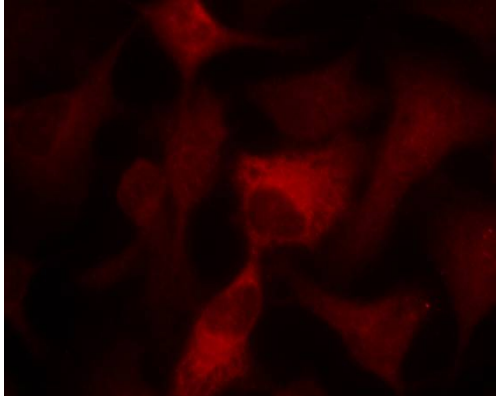
ARG51853 anti-Acetyl-CoA Carboxylase phospho (Ser79) antibody WB image

Western Blot: extracts from 293 cells untreated or treated with AICAR stained with anti-Acetyl-CoA Carboxylase (phospho Ser79) antibody ARG51853.



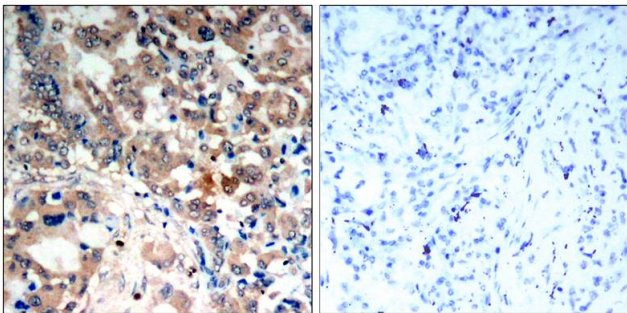
ARG51172 anti-AMPK alpha1/AMPK alpha2 antibody IHC-P image

Immunohistochemistry: paraffin-embedded human breast carcinoma tissue stained with anti-AMPK alpha1/AMPK alpha2 antibody ARG51172 (left) or the same antibody preincubated with blocking peptide (right).



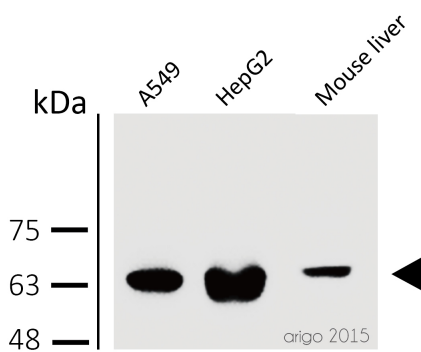
ARG51172 anti-AMPK alpha1/AMPK alpha2 antibody ICC/IF image

Immunofluorescence: methanol-fixed HeLa cells stained with anti-AMPK alpha1/AMPK alpha2 antibody ARG51172.



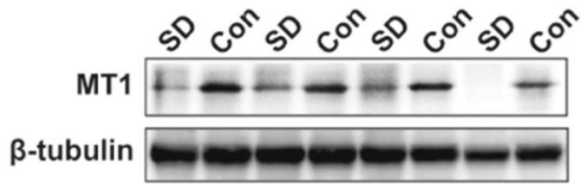
ARG51678 anti-AMPK alpha 1 / AMPK alpha 2 phospho (Thr183/Thr172) antibody IHC-P image

Immunohistochemistry: paraffin-embedded human lung carcinoma tissue, stained with anti-AMPK alpha 1 / AMPK alpha 2(phospho Thr174/Thr172) antibody ARG51678).



ARG51172 anti-AMPK alpha 1/2 antibody WB image

Western blot: 30 µg of A549, HepG2, and Mouse liver cell line lysates stained with ARG51172 anti-AMPK alpha 1/2 antibody at 1:500 dilution.



ARG65351 Goat anti-Rabbit IgG antibody (HRP) WB image

Western blot: Rat placental stained with [ARG57589 anti-MTNR1A antibody](#) at 1:1000 dilution, ARG65351 Goat anti-Rabbit IgG antibody (HRP) at 1:5000 dilution.

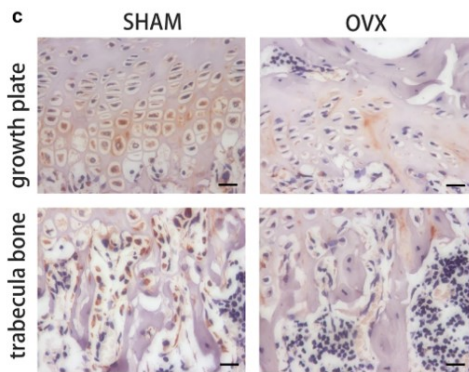
From Jinzhi Li et al. J Reprod Immunol. (2023), [doi: 10.1016/j.jri.2023.104166](#), Fig. 2.B.



ARG65351 Goat anti-Rabbit IgG antibody (HRP) WB image

Western blot: Mouse retina stained with [ARG65693 anti-alpha Tubulin antibody](#) and ARG65351 Goat anti-Rabbit IgG antibody (HRP)

From Xiaoyuan Ye et al. Mol Ther Nucleic Acids. (2024), [doi: 10.1016/j.omtn.2024.102209](#), Fig. 5.D.



ARG65351 Goat anti-Rabbit IgG antibody (HRP) IHC-P image

From Yu-Qian Song et al. J Mol Med (Berl) (2022), [doi: 10.1007/s00109-021-02165-0](#), Fig. 5.c.