

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	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 AMPKα1/2 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. 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.
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

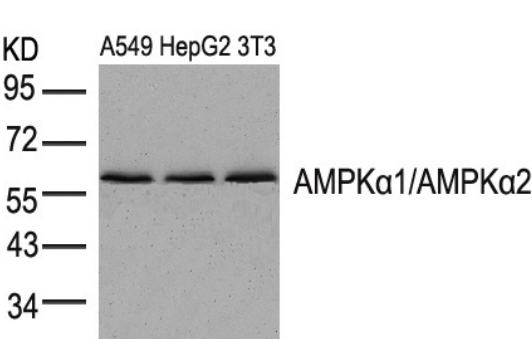
Properties

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

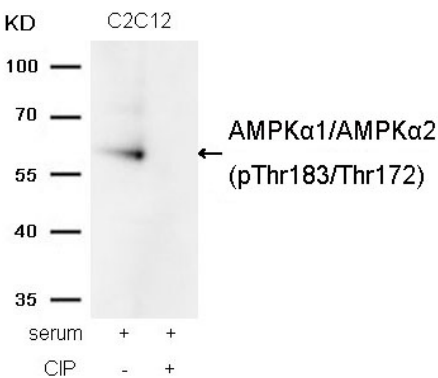
Gene Full Name	Antibody Panel for AMPK-ACC pathway
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Immune System antibody; Metabolism antibody; Neuroscience antibody; Signaling Transduction antibody

Images



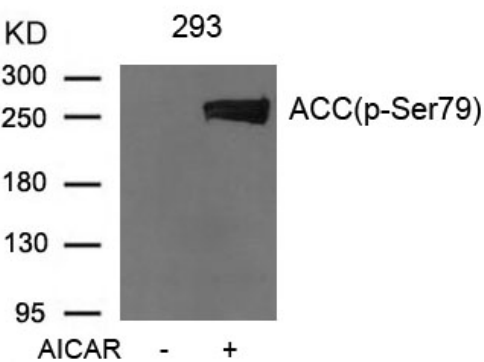
ARG51172 anti-AMPK alpha1/AMPK alpha2 antibody WB image

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



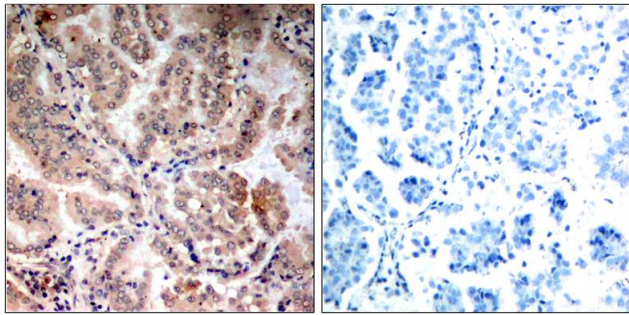
ARG51678 anti-AMPK alpha 1 / AMPK alpha 2phospho (Thr183/Thr172) antibody WB image

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.



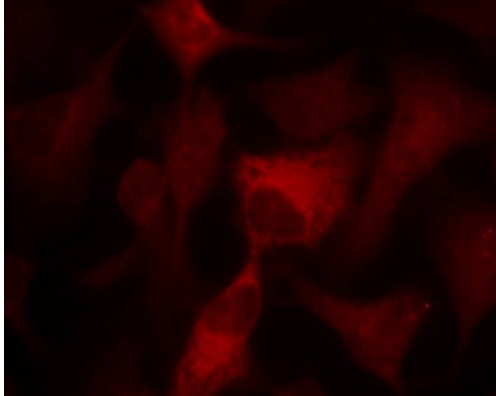
ARG51853 anti-Acetyl-CoA Carboxylase phospho (Ser79) antibody WB image

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



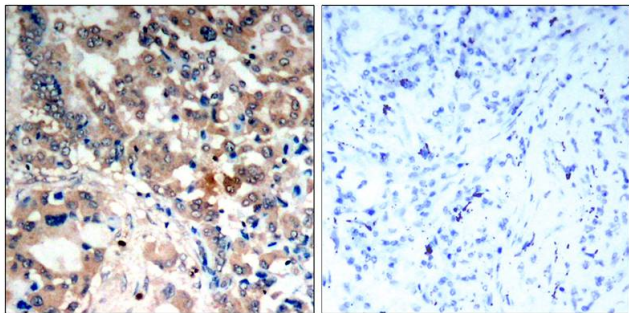
ARG51172 anti-AMPK alpha1/AMPK alpha2 antibody IHC-P image

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).



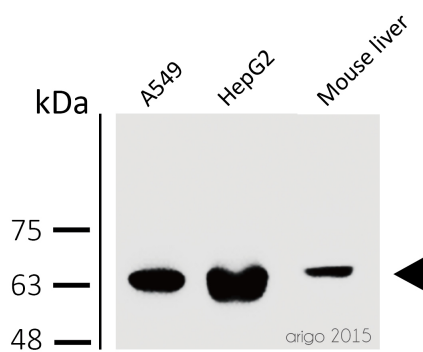
ARG51172 anti-AMPK alpha1/AMPK alpha2 antibody ICC/IF image

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



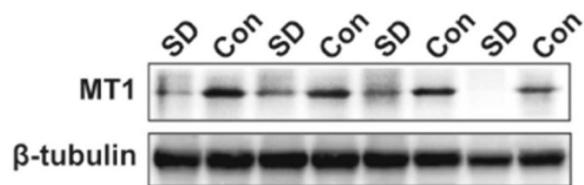
ARG51678 anti-AMPK alpha 1 / AMPK alpha 2phospho (Thr183/Thr172) antibody IHC-P image

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.

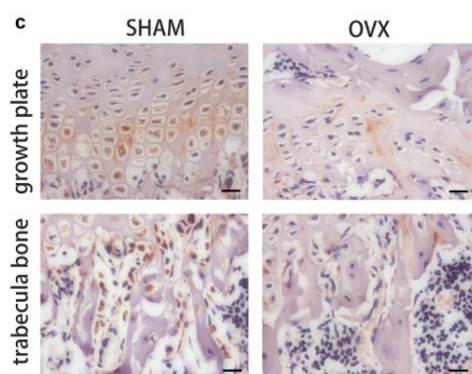
From Jinzhi Li et al. J Reprod Immunol. (2023), [doi: 10.1016/j.jri.2023.104166](#), Fig. 2.B.



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.