

Phospho-AMPK alpha-1,2 (Thr183, Thr172) Recombinant Polyclonal Antibody (10HCLC)

Product Details	
Size	100 µg
Species Reactivity	Human, Non-human primate
Host/Isotype	Rabbit / IgG
Class	Recombinant Polyclonal
Type	Antibody
Clone	10HCLC
Conjugate	Unconjugated
Immunogen	Peptide corresponding to amino acids 168 178 of human AMPK alpha
Form	Liquid
Concentration	0.5 mg/mL
Purification	Protein A
Storage buffer	PBS
Contains	0.09% sodium azide
Storage Conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_2532562

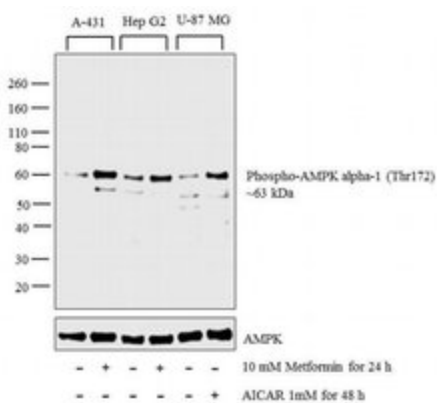
Applications	Tested Dilution	Publications
Western Blot (WB)	2 µg/mL	-
Immunocytochemistry (ICC/IF)	2-4 µg/mL	-

Product Specific Information

This antibody is predicted to react with mouse, rat, non-human primate and Drosophila based on sequence homology.

Recombinant rabbit polyclonal antibodies are unique offerings from Thermo Fisher Scientific. They are comprised of a selection of multiple different recombinant monoclonal antibodies, providing the best of both worlds - the sensitivity of polyclonal antibodies with the specificity of monoclonal antibodies - all delivered with the consistency only found in a recombinant antibody. While functionally the same as a polyclonal antibody - recognizing multiple epitope sites on the target and producing higher detection sensitivity for low abundance targets - a recombinant rabbit polyclonal antibody has a known mixture of light and heavy chains. The exact population can be produced in every lot, circumventing the biological variability typically associated with polyclonal antibody production.

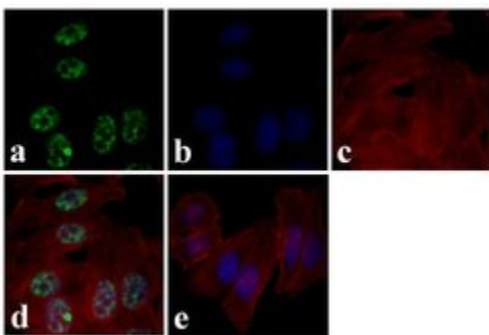
Advanced Verification Data



Phospho-AMPK alpha-1,2 (Thr183, Thr172) Antibody (710099)

Altered expression of proteins upon cell treatment demonstrates antibody specificity. Western blot using Phospho-AMPK alpha-1,2 (Thr183, Thr172) antibody (Product # 710099), shows increased expression of proteins phosphorylated at the threonine residues in A-431 and Hep G2 treated with Metformin and U-87 MG treated upon with AICAR treatment. Cell treatment validation info.

Product Images For Phospho-AMPK alpha-1,2 (Thr183, Thr172) Recombinant Polyclonal Antibody (10HCLC)

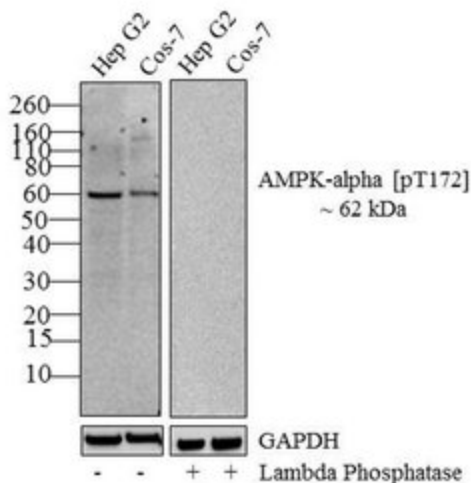


Phospho-AMPK alpha-1,2 (Thr183, Thr172) Antibody (710099) in ICC/IF

Immunofluorescence analysis of Phospho-AMPK alpha (Thr183, Thr172) was done on 70% confluent log phase HeLa cells. The cells were fixed with 4% paraformaldehyde for 15 minutes, permeabilized with 0.25% Triton X-100 for 10 minutes, and blocked with 5% BSA for 1 hour at room temperature. The cells were labeled with Phospho-AMPK alpha-1,2 (Thr183, Thr172) Recombinant Rabbit Polyclonal Antibody (Product # 710099) at 3 in 1% BSA and incubated for 3 hours at room temperature and then labeled with Alexa Fluor 488 Goat anti-Rabbit IgG Secondary Antibody (Product # A-11008) at a dilution of 1:400 for 30 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant DAPI (Product # S36938). F-actin (Panel c: red) was stained with Alexa Fluor 594 Phalloidin (Product # A12381). Panel d is a merged image showing nuclear localization. Panel e shows no primary antibody control. The images were captured at 20X magnification.

Phospho-AMPK alpha-1,2 (Thr183, Thr172) Antibody (710099) in WB

Western blot analysis of Phospho-AMPK alpha (Thr183, Thr172) was performed by loading 20 µg of Hep G2 (lane1) and Cos-7 (lane2) lysate using Novex®NuPAGE® 4-12% Bis-Tris gel (Product # NP0321BOX), XCell SureLock Electrophoresis System (Product # EI0002), Novex® Sharp Pre-Stained Protein Standard (Product # LC5800), and iBlot® Dry Blotting System (Product # IB21001). Proteins were transferred to a nitrocellulose membrane and blocked with 5% skim milk for 1 hour at room temperature. Phospho-AMPK alpha (Thr183, Thr172) was detected at ~ 62 kDa using Phospho-AMPK alpha-1,2 (Thr183, Thr172) Recombinant Rabbit Polyclonal Antibody (Product # 710099) at 1-3 µg/mL in 2.5% skim milk at 4°C overnight on a rocking platform. To confirm specificity, the corresponding blot on right was incubated with lambda phosphatase and its reactivity with antibody was tested. Goat anti-Rabbit IgG - HRP Secondary Antibody (Product # G-21234) at 1: 5000 dilution was used and chemiluminescent detection was performed using Pierce™ ECL Western blotting Substrate (Product # 32106).



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