Phospho-AMPK alpha-1,2 (Thr183, Thr172) Recombinant Rabbit Monoclonal Antibody (10H2L20)

Product Details	
Size	100 µg
Species Reactivity	Human
Host/Isotope	Rabbit / IgG
Class	Recombinant Monoclonal
Type	Antibody
Clone	10H2L20
Conjugate	Unconjugated
Immunogen	Phosphopeptide 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_2532369

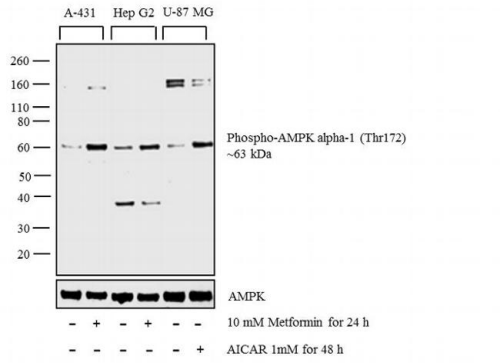
Applications	Tested	Dilution	Published
Immunocytochemistry (ICC)	✓	5 µg/mL	
Immunofluorescence (IF)	✓	5 µg/mL	
Western Blot (WB)	✓	2 µg/mL	

Product Specific Information

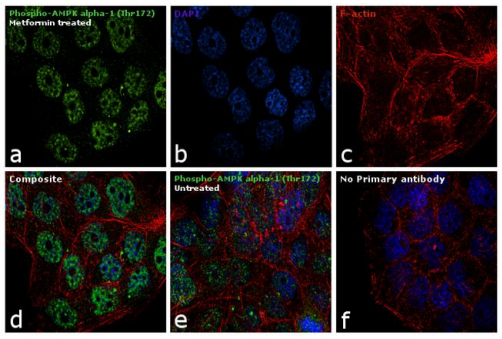
Intact IgG appears on a non-reducing gel as ~150 kDa band and upon reduction generating a ~25 kDa light chain band and a ~50 kDa heavy chain.

Recombinant rabbit monoclonal antibodies are produced using in vitro expression systems. The expression systems are developed by cloning in the specific antibody DNA sequences from immunoreactive rabbits. Then, individual clones are screened to select the best candidates for production. The advantages of using recombinant rabbit monoclonal antibodies include: better specificity and sensitivity, lot-to-lot consistency, animal origin-free formulations, and broader immunoreactivity to diverse targets due to larger rabbit immune repertoire.

Advanced Verification Data

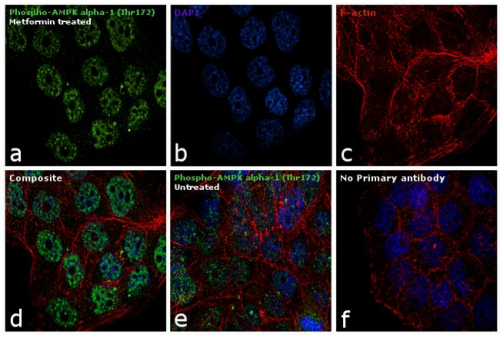


Phospho-AMPK alpha-1,2 (Thr183, Thr172) Antibody (701068)
Altered expression of proteins upon cell treatment demonstrates antibody specificity. Western blot using Phospho-AMPK alpha-1,2 (Thr183, Thr172) antibody (Product # 701068) shows increased expression of proteins phosphorylated at the threonine residues in A-431 and Hep G2 treated with Metformin and U-87 MG treated upon with AICAR treatment. Cell Treatment validation info.



Phospho-AMPK alpha-1,2 (Thr183, Thr172) Antibody (701068)
Altered expression of target protein upon cell treatment demonstrates antibody specificity. Immunofluorescence analysis of Phospho-AMPK alpha-1,2 (Thr183, Thr172) using Phospho-AMPK alpha-1,2 (Thr183, Thr172) Recombinant Rabbit Monoclonal Antibody (Product # 701068) shows induction of AMPK alpha-1 phosphorylation at Thr172 residue in A-431 cell line upon Metformin treatment. Cell Treatment validation info.

Product Images For Phospho-AMPK alpha-1,2 (Thr183, Thr172) Recombinant Rabbit Monoclonal Antibody (10H2L20)



Phospho-AMPK alpha-1,2 (Thr183, Thr172) Antibody (701068) in IF
Immunofluorescence analysis of Phospho-AMPK alpha-1,2 (Thr183, Thr172) was performed using 90% confluent log phase A-431 cells treated with 1mmol/mL Metformin for 24 hours. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with Phospho-AMPK alpha-1,2 (Thr183, Thr172) Recombinant Rabbit Monoclonal Antibody (Product # 701068) at 5µg/mL in 0.1% BSA and incubated overnight at 4 degree and then labeled with Goat anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A27034) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing nuclear localization. Panel e shows untreated cells with reduced nuclear signal. Panel f represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.

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