HK1 Monoclonal Antibody (3A10)

Product Details	
Size	100 µL
Species Reactivity	Human, Mouse, Rat
Published Species	Mouse
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	3A10
Conjugate	Unconjugated
Immunogen	Purified recombinant fragment of human HK1 expressed in E. Coli.
Form	Liquid
Concentration	Conc. Not Determined
Storage buffer	ascites
Contains	0.03% sodium azide
Storage conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_10979325

Applications	Tested Dilution	Publications
Western Blot (WB)	1:500-1:2,000	1 Publication
Immunohistochemistry (IHC)	1:200-1:1,000	-
Immunocytochemistry (ICC/IF)	1:200-1:1,000	-
Flow Cytometry (Flow)	1:200-1:400	-
ELISA (ELISA)	1:10,000	-

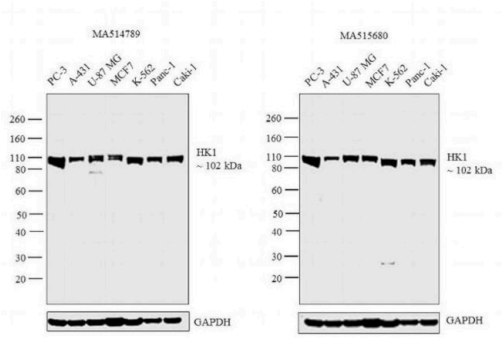
Product Specific Information

MA5-15680 targets HK1 in indirect ELISA, FACS, ICC, IHC, IF and WB applications and shows reactivity with Human, mouse, and Rat samples.

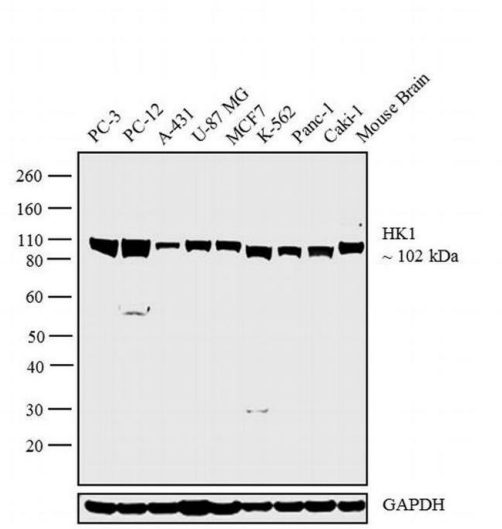
The MA5-15680 immunogen is purified recombinant fragment of human HK1 expressed in E. Coli.

MA5-15680 detects HK1 which has a predicted molecular weight of approximately 120kDa.

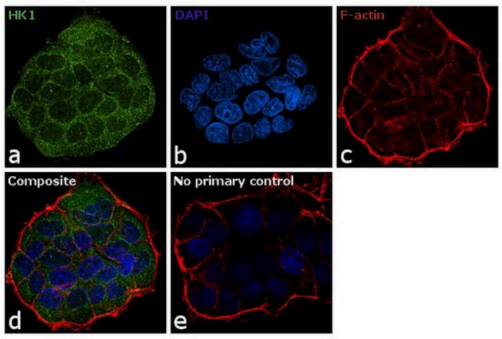
Product Images For HK1 Monoclonal Antibody (3A10)



HK1 Antibody (MA5-15680)
Antibody specificity was demonstrated by showing that antibodies raised against the same target protein perform similarly. Western blot of HK1 using HK1 Monoclonal Antibody (Product # MA5-15680), tested in parallel with HK1 Monoclonal Antibody (Product # MA5-14789), shows similar expression of HK1 in the cell lines tested. {IAV}



HK1 Antibody (MA5-15680) in WB
Western blot analysis was performed on whole cell extracts (30 µg lysate) of PC-3 (Lane 1), PC-12 (Lane 2), A-431 (Lane 3), U-87 MG (Lane 4), MCF7 (Lane 5), K-562 (Lane 6), Panc-1 (Lane 7), Caki-1 (Lane 8) and tissue extract (30 µg lysate) of Mouse Brain (Lane 9). The blot was probed with Anti-HK1 Monoclonal Antibody (Product # MA5-15680, 1:1000 dilution) and detected by chemiluminescence using Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, HRP conjugate (Product # A27036, 0.25 µg/mL, 1:4000 dilution). A 102 kDa band corresponding to HK1 was observed across the cell lines and tissue extract tested.



HK1 Antibody (MA5-15680) in ICC/IF
Immunofluorescence analysis of HK1 was performed using 70% confluent log phase MCF-7 cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with HK1 Monoclonal Antibody (3A10) (Product # MA5-15680) at 1:100 dilution in 0.1% BSA, incubated at 4 degree Celsius overnight and then labeled with Goat anti-Mouse IgG (Heavy Chain) 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 cytoplasmic localization. Panel e represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.

View more figures on thermofisher.com

1 Reference

Western Blot (1)

Brain, behavior, and immunity

Traumatic stress history interacts with sex and chronic peripheral inflammation to alter mitochondrial function of synaptosomes.

"MA5-15680 was used in Western Blotting to highlight that different mechanisms are likely in play between the sexes and that sex differences in neural outcomes may be precipitated by sex-specific effects of life experiences on mitochondrial function in the synapse."

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Year
2020

Species
Mouse