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BRG1 Polyclonal Antibody

Catalog Number PA5-17003

Product data sheet

Details	
Size	100 µL
Host/Isotope	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Immunogen	Synthetic peptide corresponding to amino acids surrounding Ala52 of human Brg1
Conjugate	Unconjugated
Form	Liquid
Concentration	31 µg/mL
Purification	Antigen affinity chromatography
Storage buffer	0.01M HEPES, pH 7.5, with 0.15M NaCl, 100µg/mL BSA, 50% glycerol
Contains	no preservative
Storage Conditions	-20°C

Species Reactivity	
Species reactivity	Human, Mouse, Non-human primate

Tested Applications	Dilution *
ChIP assay (ChIP)	2.5 µg/10^6 cells
Western Blot (WB)	1:1,000
Immunocytochemistry (ICC/IF)	1:100

* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.

Product specific information

It is not recommended to aliquot this antibody.

Background/Target Information

Brg1 (Brahma-related gene 1) is an ATPase subunit of SWI2/SNF2-like chromatin-remodeling complexes that enable access of regulatory and effector proteins in transcription, DNA repair and DNA replication. Although Brg1-containing complexes are not essential for general cell survival, they participate in transcriptional regulation of several hundred genes including those involved in interferon and stress response, immune cells differentiation, neurogenesis, cell cycle etc. and is absolutely necessary for mouse embryogenesis. Brg1 is also involved in cell growth arrest, senescence and tumour supression.

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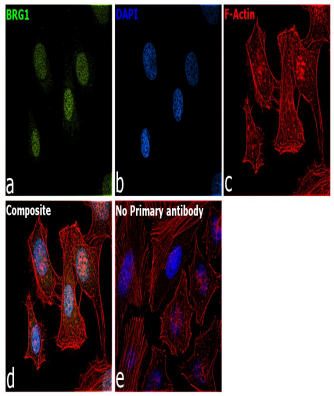
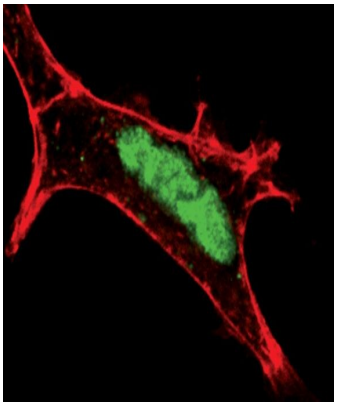
Product Images For BRG1 Polyclonal Antibody



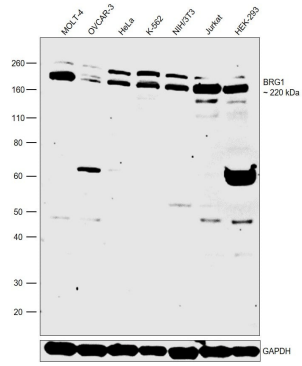
BRG1 Antibody (PA5-17003) in ICC/IF

Immunofluorescence analysis of BRG1 was performed using 70% confluent log phase HeLa cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 2% BSA for 1 hour at room temperature. The cells were labeled with BRG1 Polyclonal Antibody (Product # PA5-17003) at 1:100 dilution in 0.1% BSA, incubated at 4 degree celsius overnight and then with Donkey anti-Rabbit IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 488 (Product # A32790) 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 predominant staining in nucleus. Panel e represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.



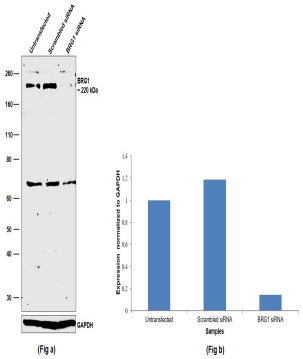
BRG1 Antibody (PA5-17003) in ICC/IF

Immunofluorescent analysis of Brg1 in 293 cells using a Brg1 polyclonal antibody (Product # PA5-17003) (green). Actin filaments are labeled with a fluorescent red phalloidin.



BRG1 Antibody (PA5-17003) in WB

Western blot was performed using BRG1 Polyclonal Antibody (Product # PA5-17003) and a 220 kDa band corresponding to BRG1 was observed in the cell line tested. Modified Whole cell extracts (1% SDS) (30 µg lysate) of MOLT-4 (Lane 1), OVCAR-3 (Lane 2), HeLa (Lane 3), K-562 (Lane 4), NIH/3T3 (Lane 5), Jurkat (Lane 6) and Hek-293 (Lane 7) were electrophoresed using NuPAGE™ 4-12% Bis-Tris Protein Gel (Product # NP0322BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # LC2001) by XCell SureLock™ Mini-Cell and XCell II™ Blot Module (Product # EI0002). The blot was probed with the primary antibody (1:1000 dilution) and detected by chemiluminescence with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A27036, 1:4000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using SuperSignal™ West Dura Extended Duration Substrate (Product # 34076).



BRG1 Antibody (PA5-17003) in WB

Knockdown of BRG1 was achieved by transfecting HeLa with BRG1 specific siRNAs (Silencer® select Product # s13140, s13139). Western blot analysis (Fig. a) was performed using modified whole cell extracts (1% SDS) from the BRG1 knockdown cells (lane 3), non-specific scrambled siRNA transfected cells (lane 2) and untransfected cells (lane 1). The blot was probed with BRG1 Polyclonal Antibody (Product # PA5-17003, 1:1,000 dilution) and Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A27036, 0.25 µg/mL, 1:4,000 dilution). Densitometric analysis of this western blot is shown in histogram (Fig. b). Decrease in signal upon siRNA mediated knock down confirms that antibody is specific to BRG1. (Note: An uncharacterized band was observed at ~70 kDa).

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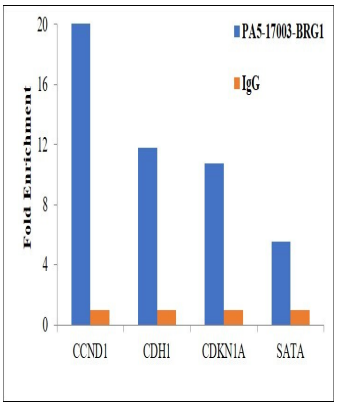
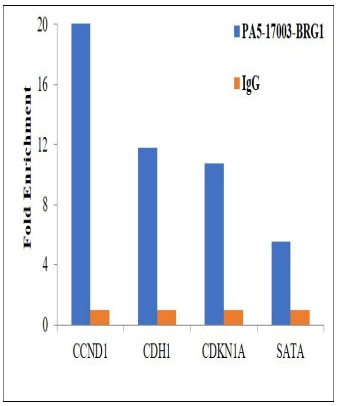


BRG1 Antibody (PA5-17003) in ChIP

Chromatin Immunoprecipitation (ChIP) assay of endogenous BRG1 protein using BRG1 Antibody: ChIP was performed using Anti-BRG1 Rabbit Polyclonal Antibody (Product # PA5-17003, 2.5 µg) on sheared chromatin from SH-SY5Y cells using the MAGnify ChIP System kit (Product # 49-2024). Normal Rabbit IgG was used as a negative IP control. The purified DNA was analyzed by qPCR using primers binding to promoter region of CDKN1A, CDH1, CCND1 and SATA satellite repeats. Data is presented as fold enrichment of the antibody signal versus the negative control IgG using the comparative CT method.



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