

Anti-Brg1 Antibody, Rabbit Polyclonal, Affinity-Purified

70-230 100 µg

Brg1 (1647 aa, 185 kDa) is transcriptional coactivator cooperating with nuclear hormone receptors to potentiate transcriptional activation. Component of the CREST-BRG1 complex, a multi protein complex that regulates promoter activation by orchestrating a calcium-dependent release of a repressor complex and a recruitment of an activator complex. In resting neurons, transcription of the c-FOS promoter is inhibited by BRG1-dependent recruitment of a phospho-RB1-HDAC repressor complex. Upon calcium influx, RB1 is dephosphorylated by calcineurin, which leads to release of the repressor complex. At the same time, there is increased recruitment of CREBBP to the promoter by a CREST-dependent mechanism, which leads to transcriptional activation.

Applications

1. Western blot (1/1,000 dilution, Fig. 1)
2. Immunoprecipitation (assay dependent)
3. Immunofluorescence staining (1/1,00 dilution, Fig. 3)

Specification

Immunogen: C-terminal 50 amino acids of human BRG1, C-KLGRKEKAQDRLK GGRRRPSR GSRAKPVVSDDDSEEEQEEDRSGSGSEED, conjugated with KLH

Reactivity: Human and mouse. Not tested in other species.

Form: 1 mg/ml in 1x PBS, 50% glycerol, filter-sterilized, azide and carrier free.

Product: Affinity-purified from rabbit antiserum with immunogen peptide conjugated with agarose beads.

Storage: Shipped at 4°C. Upon arrival, spin-down and store at -20°C.

Data Link: [uniprot/P51532](https://www.uniprot.org/entry/P51532) human Brg1

Reference: Nishimoto N. et al (2012) Heterocomplex formation by Arp4 and β -actin is involved in the integrity of the Brg1 chromatin remodeling complex. J Cell Sci.125: 3870-82

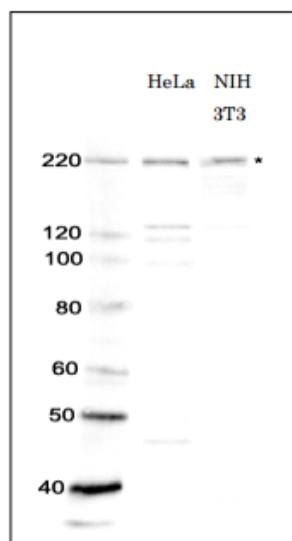


Fig.1 Identification of Brg1 in whole cell extracts of human and mouse cells by Western Blot using anti-Brg1 antibody.

Lane 1: Protein size makers (kDa)

Lane 2: HeLa (human) cell extract

Lane 3: NIH 3T3 (mouse) cell extract

*Star indicates the position of Brg1 protein bands (Predicted molecular mass of Bgr1 is 185 kDa).

Anti-Brg1 antibody was used at 1/1,000 dilution

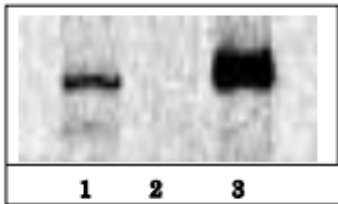


Fig 2. Immunoprecipitation of Brg1 protein from nuclear extracts of HeLa cells by using anti-Brg1 antibody. Brg1 was precipitated with anti-Brg1 antibody and protein G-conjugated agarose beads and probed with anti-Brg1 antibody by Western Blot.
Lane 1: Nuclear extracts
Lane 2: Control IP with non-immune IgG
Lane 3: Immunoprecipitation with anti-Brg1 antibody

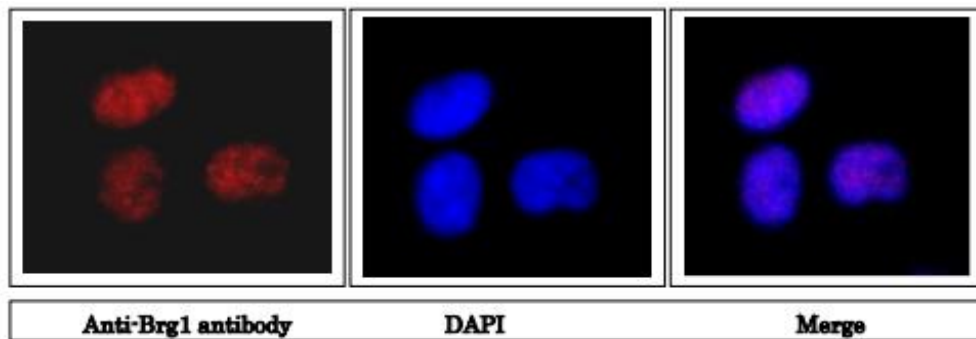


Fig. 3. Immunofluorescence staining of Brg1 protein in HeLa cells. HeLa cells were fixed in 4% paraformaldehyde overnight and permeabilized in 0.25% Triton X-100 in PBS for 10 min. Anti-Brg1 antibody was used at 1/1,000 dilution. Secondary antibody, goat anti-rabbit IgG conjugated with Alex488 was used at 1/1,000 dilution. Nuclei were stained with DAPI. Brg1 protein is localized in nuclei

Key words: BAF complex, Chromatin remodeling complex, CREBBP, CREST-BRG1 complex, CYP27B1 gene, c-Fos promoter, Nuclear hormone receptor, Neural stem cell, Neuron, NR2B promoter, phospho-RB1-HDAC repressor complex , Transcriptional coactivator, Vitamin D receptor, WINAC complex, Zeb1