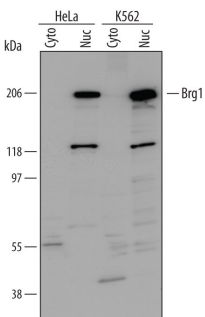
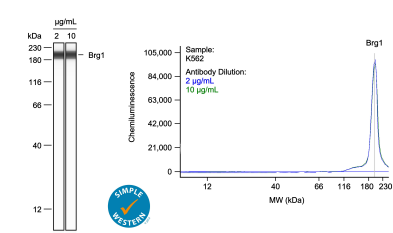
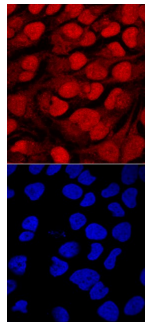


DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human Brg1 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Brg1 Gln673-Asn774 Accession # P51532
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS		
Please Note: Optimal dilutions should be determined by each laboratory for each application. <i>General Protocols</i> are available in the <i>Technical Information</i> section on our website.		
	Recommended Concentration	Sample
Western Blot	2 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below
Simple Western	2-10 µg/mL	K562 human chronic myelogenous leukemia cell line
Knockout Validated	Brg1 is specifically detected in HEK293T human embryonic kidney parental cell line but is not detectable in Brg1 knockout HEK293T cell line.	

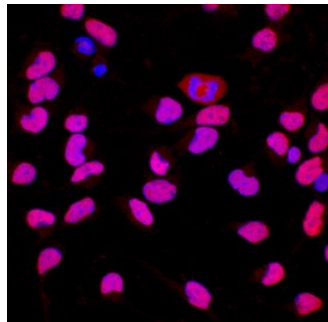
DATA	
<p>Western Blot</p>  <p>Detection of Human Brg1 by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line and K562 human chronic myelogenous leukemia cell line, cytoplasmic and nuclear extracts. PVDF membrane was probed with 2 µg/mL Goat Anti-Human Brg1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5738) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band for Brg1 was detected at approximately 205 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Simple Western</p>  <p>Detection of Human Brg1 by Simple Western™. Left: Simple Western lane view shows lysates of K562 human chronic myelogenous leukemia cell line, loaded at 0.1 mg/ml. A specific band was detected for Brg1 at approximately 200 kDa (as indicated) using both 2 µg/ml and 10 µg/ml of Goat Anti-Human Brg1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5738) followed by HRP-conjugated Donkey Anti-Goat Secondary Antibody (Catalog # 043-522-2). This experiment was conducted under reducing conditions and using the 12-230kDa separation system. Right: Simple Western electropherogram showing the same Goat Anti-Human Brg1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5738) tested at 2 µg/ml (blue line) and 10 µg/ml (green line) in the K562 human chronic myelogenous leukemia cell line.</p>

Immunocytochemistry



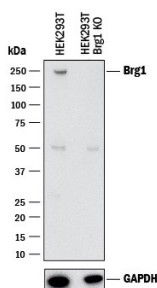
Brg1 in HeLa Human Cell Line. Brg1 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Goat Anti-Human Brg1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5738) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red, upper panel; Catalog # Catalog # NL001) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunocytochemistry



Brg1 in Rat Cortical Stem Cells. Brg1 was detected in immersion fixed undifferentiated rat cortical stem cells using Goat Anti-Human Brg1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5738) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to nuclei. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Knockout Validated



Western Blot Shows Human Brg1 Specificity by Using Knockout Cell Line. Western blot shows lysates of HEK293T human embryonic kidney parental cell line and Brg1 knockout HEK293T cell line (KO). PVDF membrane was probed with 2 µg/mL of Goat Anti-Human Brg1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5738) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # Catalog # HAF017). A specific band was detected for Brg1 at approximately 250 kDa (as indicated) in the parental HEK293T cell line, but is not detectable in knockout HEK293T cell line. GAPDH (Catalog # Catalog # AF5718) is shown as a loading control. This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

- Reconstitution** Reconstitute at 0.2 mg/mL in sterile PBS. For liquid material, refer to CoA for concentration.
- Shipping** Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
- Stability & Storage** Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
- 12 months from date of receipt, -20 to -70 °C as supplied.
 - 1 month, 2 to 8 °C under sterile conditions after reconstitution.
 - 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Brg1 (Brm/Swi2-related gene 1), also known as SMARCA4 (Swi/SNF-related matrix-associated actin-dependent regulator of chromatin, subfamily A, member 4), SNF2L4 and SNF2β, is a 205 kDa member of the SNF2 helicase family of molecules. It is a ubiquitously expressed, nuclear-localized chromatin remodeling ATPase that, depending upon its associated complex, may both facilitate and inhibit gene transcription. Human SMARCA4 is 1647 amino acids (aa) in length, and contains an HSA domain (aa 460-532), one BRK region (aa 610-654), six potential phosphoserine sites between aa 610-662, a DEXDc domain that unwinds RNA and DNA (aa 774-913), one Bromo domain (aa 1477-1547) and eight potential phosphoserine sites between aa 1570-1644.