

BRD4 Recombinant Monoclonal Antibody [BL-149-2H5]

Rabbit Recombinant Monoclonal

Purified		Protein ID	NP_490597.1
Catalog No.	A700-004	GeneID	23476
Lot No.	A700-004-4		

APPLICATIONS	WB, IP, IHC, ICC, ICC-IF, ChIP-Seq, F														
SPECIES REACTIVITY	Human, Mouse														
AMOUNT	100 µl (10 blots)														
CONCENTRATION	100 µg/ml														
STORAGE/SHELF LIFE	2 – 8°C / 1 year from date of receipt														
PHYSICAL STATE	Liquid														
BUFFER	Borate Buffered Saline (BBS) pH 8.2 with 0.1% BSA and 0.09% Sodium Azide														
ISOTYPE	IgG														
CLONE #	BL-149-2H5														
ORIGIN	USA														
PRODUCTION PROCEDURES	<p>Recombinant antibody was purified from cell culture supernatant.</p> <p>The epitope recognized by A700-004 maps to a region between residue 1312 and 1362 of human bromodomain-containing protein 4 using the numbering given in entry NP_490597.1 (GeneID 23476).</p>														
APPLICATIONS	<p>Centrifuge tube to remove product from lid. Optimal working dilutions should be determined experimentally by the investigator. Prepare working dilution immediately before use.</p> <table><tr><td>Western Blot</td><td>1:1000</td></tr><tr><td>Immunoprecipitation</td><td>20 µl/mg lysate</td></tr><tr><td>Immunohistochemistry</td><td>1:100 to 1:500. Epitope retrieval with citrate buffer pH6.0 is recommended for FFPE tissue sections.</td></tr><tr><td>Immunocytochemistry</td><td>1:100 to 1:500. Epitope retrieval with citrate buffer pH6.0 is recommended for FFPE cell sections.</td></tr><tr><td>Immunofluorescence (ICC)</td><td>1:25 – 1:250. Formaldehyde fixation is recommended. Permeabilization with Triton-X 100 is recommended for formaldehyde-fixed cells.</td></tr><tr><td>ChIP-Seq</td><td>A previous lot has qualified for ChIP-Seq. 10 – 40 µl per 30 µg chromatin.</td></tr><tr><td>Flow Cytometry</td><td>Fixed in 4% formaldehyde and permeabilized with 90% methanol. 1 µl per 1 x 10⁶ cells.</td></tr></table>	Western Blot	1:1000	Immunoprecipitation	20 µl/mg lysate	Immunohistochemistry	1:100 to 1:500. Epitope retrieval with citrate buffer pH6.0 is recommended for FFPE tissue sections.	Immunocytochemistry	1:100 to 1:500. Epitope retrieval with citrate buffer pH6.0 is recommended for FFPE cell sections.	Immunofluorescence (ICC)	1:25 – 1:250. Formaldehyde fixation is recommended. Permeabilization with Triton-X 100 is recommended for formaldehyde-fixed cells.	ChIP-Seq	A previous lot has qualified for ChIP-Seq. 10 – 40 µl per 30 µg chromatin.	Flow Cytometry	Fixed in 4% formaldehyde and permeabilized with 90% methanol. 1 µl per 1 x 10 ⁶ cells.
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IHC HUMAN CONTROLS	Bladder Cell Carcinoma, Breast Carcinoma, Ovarian Carcinoma, Prostate Carcinoma, Tonsil, A2780 Cells, A-549 Cells, HEK293T Cells, HeLa Cells, Jurkat Cells, KG-1 Cells, MJ Cells, OVCAR-8 Cells														
ADDITIONAL INFO	<p>https://www.bethyl.com/product/A700-004</p> <p>Use the link above to view SDS, a current list of citations, and other product specific information.</p>														

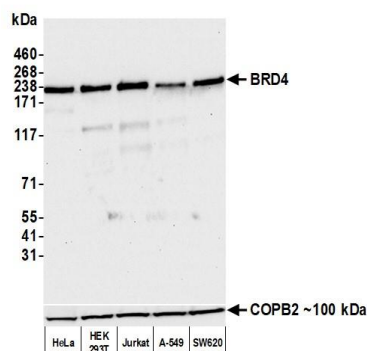
This document certifies that this product has met all of the quality control standards defined by Bethyl Laboratories, Inc.

Michael Spencer, PhD

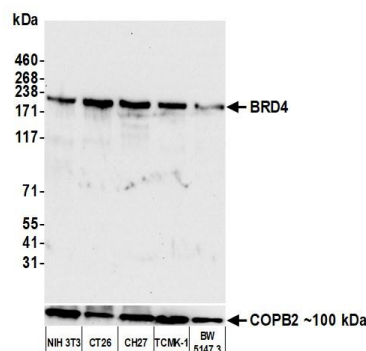
Date: October 27, 2021

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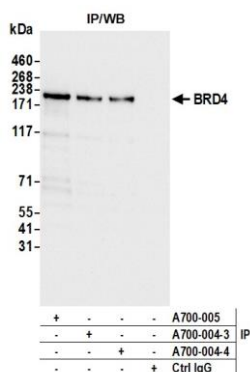
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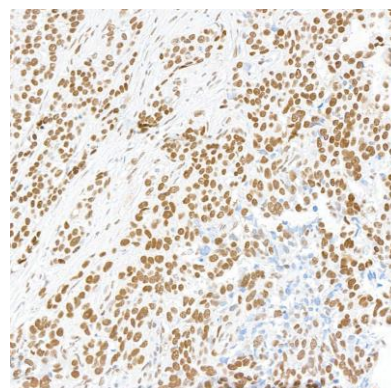
Detection of human BRD4 by western blot. *Samples:* Whole cell lysate (25 µg) from HeLa, HEK293T, Jurkat, A-549, and SW620 cells prepared using NETN lysis buffer. *Antibody:* Rabbit anti-BRD4 recombinant monoclonal antibody [BL-149-2H5] (A700-004 lot 4) used at 1:1000. *Secondary:* HRP-conjugated goat anti-rabbit IgG (A120-101P). Chemiluminescence with an exposure time of 10 seconds. Lower Panel: Rabbit anti-COPB2 antibody (A304-523A).



Detection of mouse BRD4 by western blot. *Samples:* Whole cell lysate (10 µg) from NIH 3T3, CT26, CH27, TCMK-1, and BW5147.3 cells prepared using NETN lysis buffer. *Antibody:* Rabbit anti-BRD4 recombinant monoclonal antibody [BL-149-2H5] (A700-004 lot 4) used at 1:1000. *Secondary:* HRP-conjugated goat anti-rabbit IgG (A120-101P). Chemiluminescence with an exposure time of 10 seconds. Lower Panel: Rabbit anti-COPB2 antibody (A304-523A).



Detection of human BRD4 by western blot of immunoprecipitates. *Samples:* Whole cell lysate (1.0 mg per IP reaction; 5% of IP loaded) from HeLa cells prepared using NETN lysis buffer. *Antibodies:* Rabbit anti-BRD4 recombinant monoclonal antibody [BL-149-2H5] (A700-004 lot 4) used for IP at 20 µl/mg lysate. BRD4 was also immunoprecipitated by a previous lot of this antibody (A700-004 lot 3) and a second antibody against a different epitope of BRD4 (A700-005). For blotting immunoprecipitated BRD4, A700-004 was used at 1:1000. Chemiluminescence with an exposure time of 3 seconds.

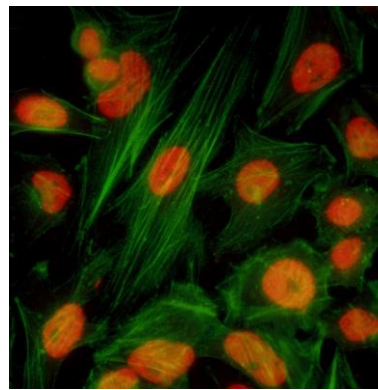


Detection of human BRD4 by immunohistochemistry. *Sample:* FFPE section of breast carcinoma. *Antibody:* Rabbit anti-BRD4 recombinant monoclonal antibody (A700-004-4). *Secondary:* HRP-conjugated goat anti-rabbit IgG (A120-501P).

**Detection of human BRD4 by immunocytochemistry.**

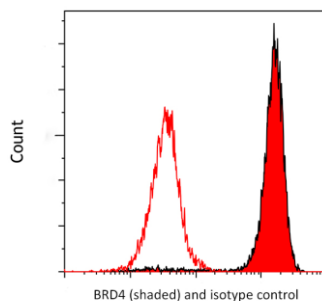
Sample: FFPE section of HeLa cells. *Antibody:* Rabbit anti-BRD4 recombinant monoclonal antibody (A700-004-4).

Secondary: HRP-conjugated goat anti-rabbit IgG (A120-501P).

**Detection of human BRD4 by immunocytochemistry.**

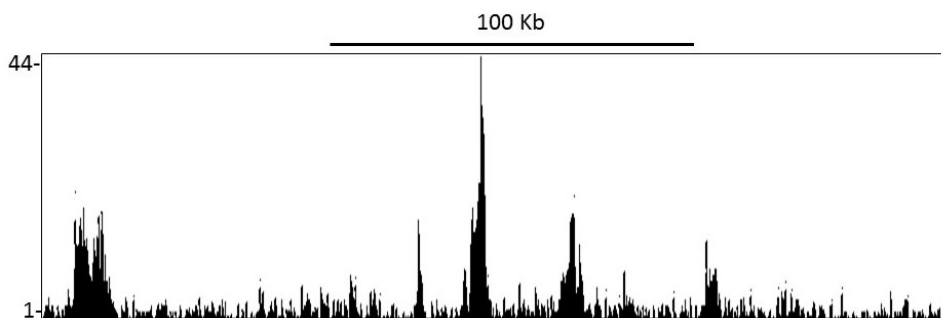
Sample: Formaldehyde-fixed HeLa cells. *Antibody:* Rabbit anti-BRD4 recombinant monoclonal antibody

[BL-149-2H5] (A700-004 lot 2) used at 1:250. *Secondary:* DyLight® 550-conjugated goat anti-rabbit IgG cross-adsorbed antibody (A120-201D3).



BRD4 (shaded) and isotype control

Detection of human BRD4 (shaded) in KG-1 cells by flow cytometry. *Antibody:* Rabbit anti-BRD4 recombinant monoclonal [BL-149-2H5] (A700-004 lot 3) or isotype control (unshaded). *Secondary:* DyLight® 650-conjugated goat anti-rabbit IgG (A120-201D5).



Localization of BRD4 Binding Sites by ChIP-seq. Chromatin from Mia PaCa-2 cells was immunoprecipitated with anti-BRD4 antibody A700-004 and analyzed by DNA sequencing. The figure illustrates the peak distribution of BRD4 binding within a 250 Kb region of chromosome 7 as detected using anti-BRD4 antibody A700-004. ChIP-seq validation performed by Active Motif, Carlsbad, CA.