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Anti-Cbx8 Antibody Picoband™ (monoclonal, 8G7)

Catalog # ABO15052

Product Information

Application	WB, IHC, FC
Primary Accession	Q9HC52
Host	Mouse
Isotype	Mouse IgG2b
Reactivity	Human
Clonality	Monoclonal
Format	Lyophilized
Description	Anti-Cbx8 Antibody Picoband™ (monoclonal, 8G7) . Tested in Flow Cytometry, IHC, WB applications. This antibody reacts with Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	57332
Other Names	Chromobox protein homolog 8, Polycomb 3 homolog, Pc3, hPc3, Rectachrome 1, CBX8, PC3, RC1
Calculated MW	43396
Application Details	Western blot, 0.25-0.5 □g/ml, Human Immunohistochemistry (Paraffin-embedded Section), 2-5 □g/ml, Human Flow Cytometry, 1-3 □g/1x10^6 cells, Human
Source	Eukaryota
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.
Clone Names	Clone: 8G7
Immunogen	E.coli-derived human Cbx8 recombinant protein (Position: M1-R389).
Purification	Immunogen affinity purified.
Storage	Store at -20˚C for one year from date of receipt. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles.

Protein Information

Name	CBX8

Synonyms	PC3, RC1
Function	Component of a Polycomb group (PcG) multiprotein PRC1-like complex, a complex class required to maintain the transcriptionally repressive state of many genes, including Hox genes, throughout development. PcG PRC1 complex acts via chromatin remodeling and modification of histones; it mediates monoubiquitination of histone H2A 'Lys-119', rendering chromatin heritably changed in its expressibility.
Cellular Location	Nucleus.

Background

CBX8 functions as a transcriptional repressor and has a role in DNA damage response. This gene is mapped to chromosome 17q25.3 based on an alignment of the CBX8 sequence with the genomic sequence (GRCh38).

Images

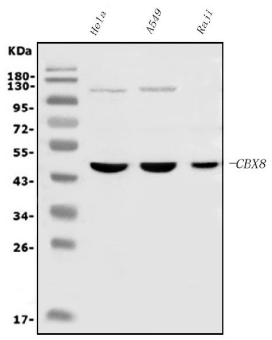

Figure 1. Western blot analysis of Cbx8 using anti-Cbx8 antibody (M05234).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30ug of sample under reducing conditions.
Lane 1: human Hela whole cell lysates,
Lane 2: human A549 whole cell lysates,
Lane 3: human Raji whole cell lysates.
After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-Cbx8 antigen affinity purified monoclonal antibody (Catalog # M05234) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for Cbx8 at approximately 45KD. The expected band size for Cbx8 is at 45KD.

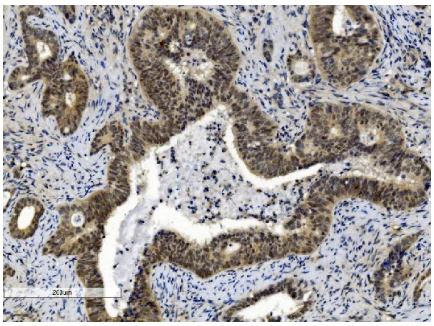

Figure 2. IHC analysis of Cbx8 using anti-Cbx8 antibody (M05234).
Cbx8 was detected in paraffin-embedded section of human gallbladder adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-Cbx8 Antibody (M05234) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.

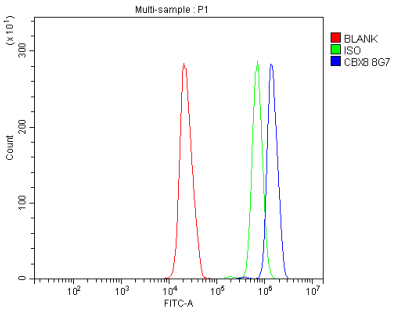

Figure 3. Flow Cytometry analysis of HL-60 cells using anti-Cbx8 antibody (M05234).
Overlay histogram showing HL-60 cells stained with M05234 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Cbx8 Antibody (M05234, 1 µg/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10 µg/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 µg/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.