10320 Camino Santa Fe, Suite G
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Anti-Cbx8 Antibody Picoband™ (monoclonal, 8G7)

Catalog # ABO15052

Specification

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

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

Gene ID 57332

Other Names
Chromobox protein homolog 8, Polycomb 3 homolog, Pc3, hPc3, Rectachrome 1, CBX8, PC3, RC1

Calculated MW
45 kDa KDa

Application Details
Western blot, 0.25-0.5 µg/ml, Human
 Immunohistochemistry (Paraffin-embedded Section), 2-5 µg/ml, Human
 Flow Cytometry, 1-3 µg/1x10^6 cells, Human

Contents
Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.

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.**

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

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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.

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

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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

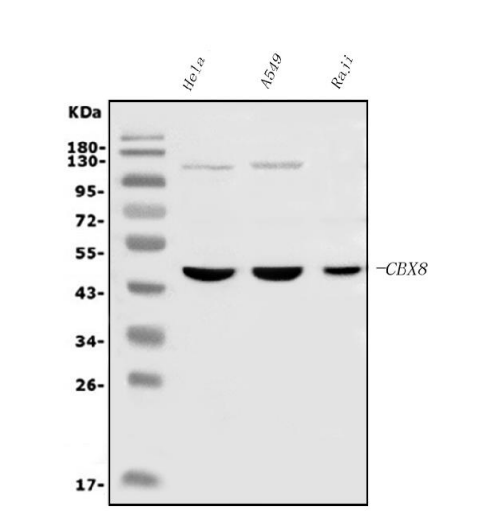

Figure 1. Western blot analysis of Cbx8 using anti-Cbx8 antibody (M05234).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30ug of sample under reducing conditions.
Lane 1: human Hela whole cell lysates,
Lane 2: human A549 whole cell lysates,
Lane 3: human Raji whole cell lysates.

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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.

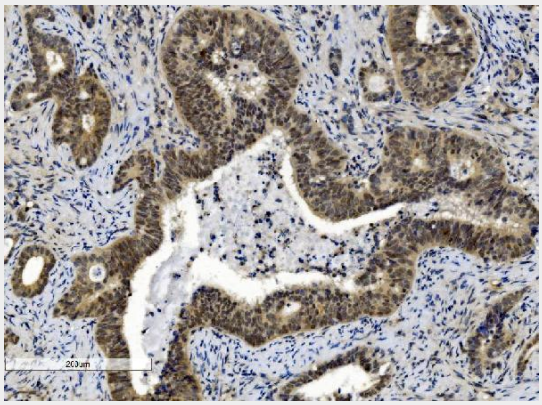

Figure 2. IHC analysis of Cbx8 using anti-Cbx8 antibody (M05234).
Cbx8 was detected in paraffin-embedded section of human gallbladder adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. 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.

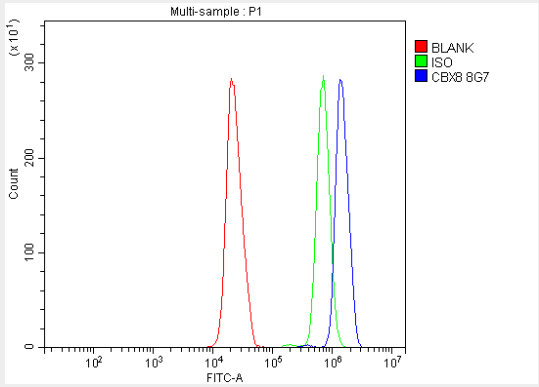

Figure 3. Flow Cytometry analysis of HL-60 cells using anti-Cbx8 antibody (M05234).
Overlay histogram showing HL-60 cells stained with M05234 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Cbx8 Antibody (M05234, 1 µg/1x10^6 cells) for 30 min at 20°C. 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.

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