10320 Camino Santa Fe, Suite G
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Anti-CTBP2 Antibody Picoband™ (monoclonal, 7F3E1)

Catalog # ABO16619

Specification

Anti-CTBP2 Antibody Picoband™ (monoclonal, 7F3E1) - Product Information

Application	**WB, IHC, FC**
Primary Accession	P56545
Host	**Mouse**
Isotype	**IgG2a**
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Format	**Lyophilized**

Description
Anti-CTBP2 Antibody Picoband™ (monoclonal, 7F3E1) . Tested in Flow Cytometry, IHC, WB applications. This antibody reacts with Human, Mouse, Rat.

Reconstitution
Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.

Anti-CTBP2 Antibody Picoband™ (monoclonal, 7F3E1) - Additional Information

Gene ID 1488

Other Names
C-terminal-binding protein 2, CtBP2, CTBP2

Calculated MW
49 kDa KDa

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

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

Immunogen
E.coli-derived human CTBP2 recombinant protein (Position: H321-Q445). human CTBP2 shares 99.2% and 98.4% amino acid (aa) sequence identity with mouse and rat CTBP2, respectively.

Purification
Immunogen affinity purified.

Storage	**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 freezing and thawing.**

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Anti-CTBP2 Antibody Picoband™ (monoclonal, 7F3E1) - Protein Information

Name CTBP2

Function
Corepressor targeting diverse transcription regulators. Functions in brown adipose tissue (BAT) differentiation (By similarity).

Cellular Location
Nucleus. Synapse.

Tissue Location
Ubiquitous. Highest levels in heart, skeletal muscle, and pancreas

Anti-CTBP2 Antibody Picoband™ (monoclonal, 7F3E1) - 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-CTBP2 Antibody Picoband™ (monoclonal, 7F3E1) - Images

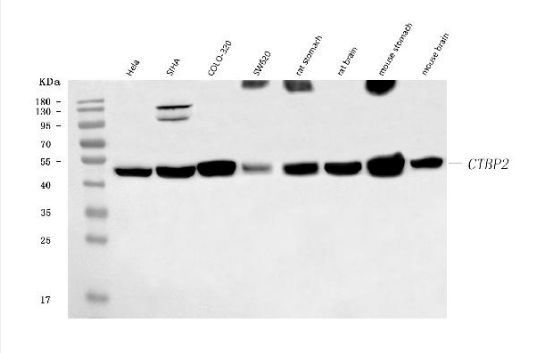

Figure 1. Western blot analysis of CTBP2 using anti-CTBP2 antibody (M02567-3).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human Hela whole cell lysates,
Lane 2: human SiHa whole cell lysates,
Lane 3: human COLO 320 whole cell lysates,
Lane 4: human SW620 whole cell ysates,
Lane 5: rat stomach tissue lysates,
Lane 6: rat brain tissue lysates,
Lane 7: mouse stomach tissue lysates,
Lane 8: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-CTBP2 antigen affinity purified monoclonal antibody (Catalog # M02567-3) 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 CTBP2 at approximately 49 kDa. The expected band size for CTBP2 is at 49 kDa.

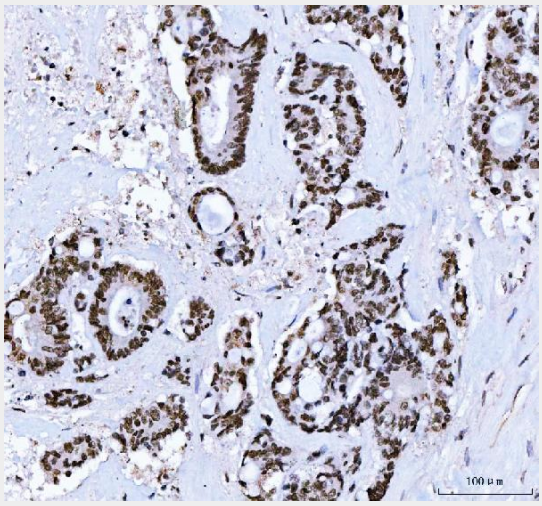

Figure 2. IHC analysis of CTBP2 using anti-CTBP2 antibody (M02567-3).
CTBP2 was detected in a paraffin-embedded section of human colorectal adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-CTBP2 Antibody (M02567-3) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

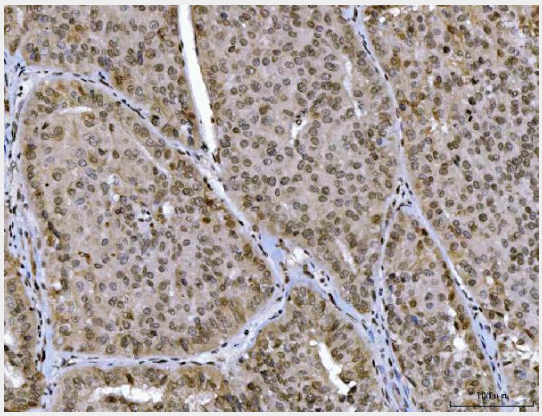

Figure 3. IHC analysis of CTBP2 using anti-CTBP2 antibody (M02567-3).
CTBP2 was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-CTBP2 Antibody (M02567-3) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

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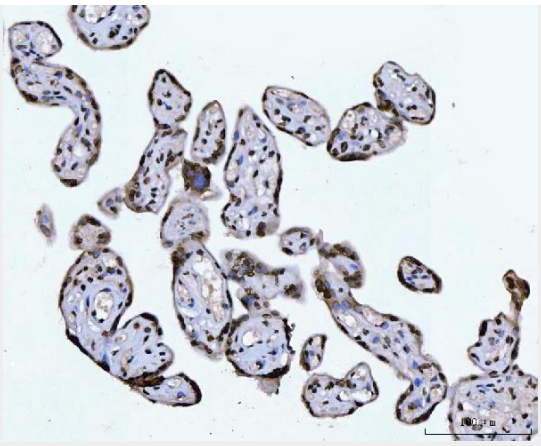

Figure 4. IHC analysis of CTBP2 using anti-CTBP2 antibody (M02567-3).
CTBP2 was detected in a paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-CTBP2 Antibody (M02567-3) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

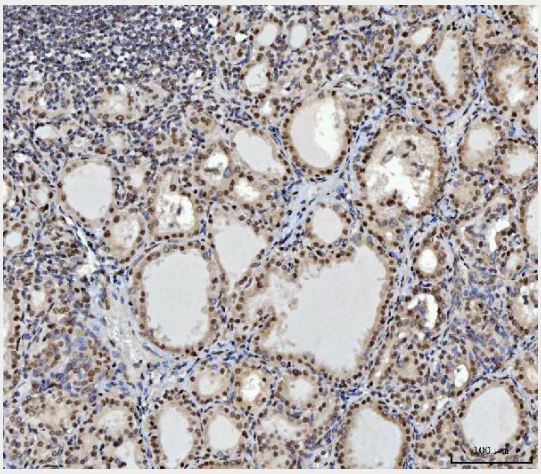

Figure 5. IHC analysis of CTBP2 using anti-CTBP2 antibody (M02567-3).
CTBP2 was detected in a paraffin-embedded section of human thyroid cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-CTBP2 Antibody (M02567-3) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

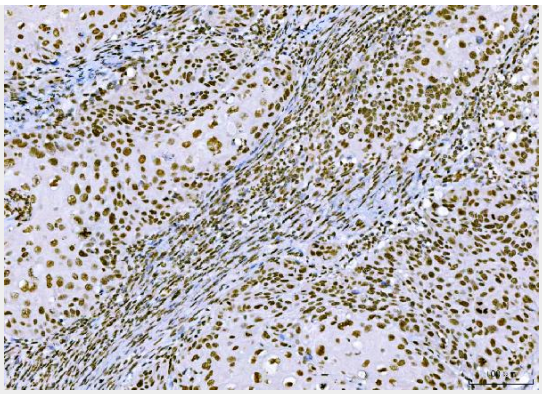

Figure 6. IHC analysis of CTBP2 using anti-CTBP2 antibody (M02567-3).
CTBP2 was detected in a paraffin-embedded section of human laryngeal squamous cell carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-CTBP2 Antibody (M02567-3) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

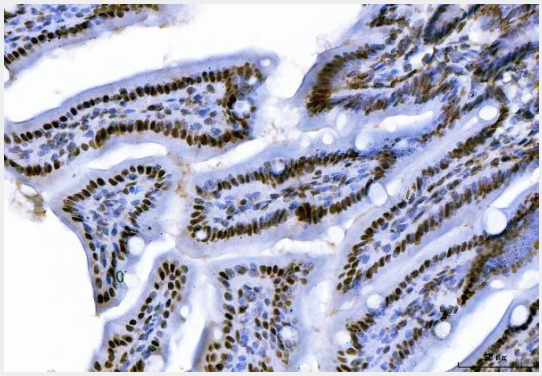

Figure 7. IHC analysis of CTBP2 using anti-CTBP2 antibody (M02567-3).
CTBP2 was detected in a paraffin-embedded section of mouse colon tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-CTBP2 Antibody (M02567-3) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

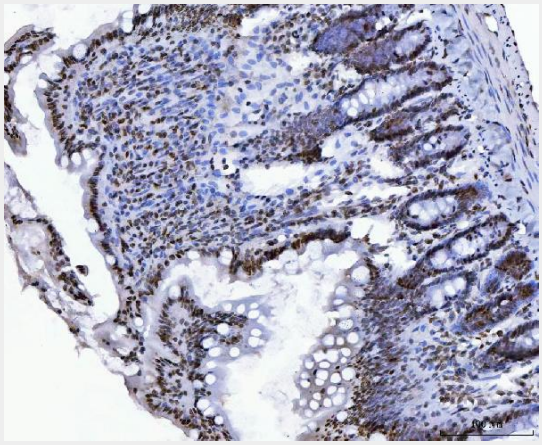

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Figure 8. IHC analysis of CTBP2 using anti-CTBP2 antibody (M02567-3).
CTBP2 was detected in a paraffin-embedded section of rat colon tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-CTBP2 Antibody (M02567-3) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

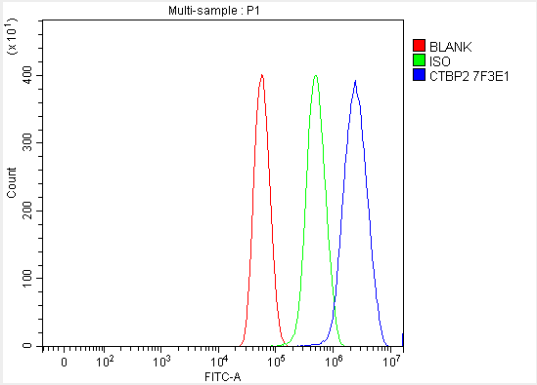

Figure 9. Flow Cytometry analysis of U87 cells using anti-CTBP2 antibody (M02567-3).
Overlay histogram showing U87 cells stained with M02567-3 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-CTBP2 Antibody (M02567-3, 1 µg/1x10^6 cells) for 30 min at 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-CTBP2 Antibody Picoband™ (monoclonal, 7F3E1) - Background

The E1a region of group C adenoviruses encodes 2 nearly identical proteins that are largely responsible for the oncogenic properties of adenoviruses. The CTBP1 protein binds to the C-terminal half of these E1A proteins. It's predicted that CTBP2 is a 445-amino acid protein and it is 72% identical to CTBP1. The CTBP2 gene is mapped to chromosome 10q26.13. CTBP2 is a mammalian corepressor that targets diverse transcriptional regulators. It bounds the short medial portion of delta-EF1 containing the PLDLSL motif and it enhances transrepression activity of delta-EF1.