

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/1x10⁶ 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.**

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 Cytometry](#)
- [Cell Culture](#)

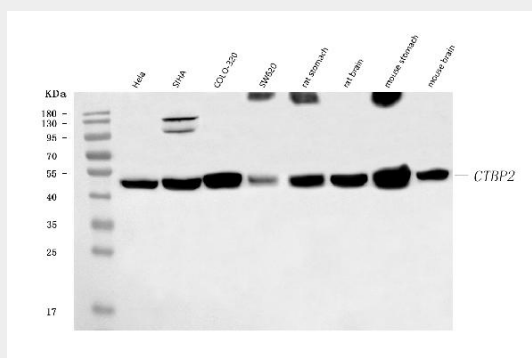
Anti-CTBP2 Antibody Picoband™ (monoclonal, 7F3E1) - Images

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 lysates,

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 μ g/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.

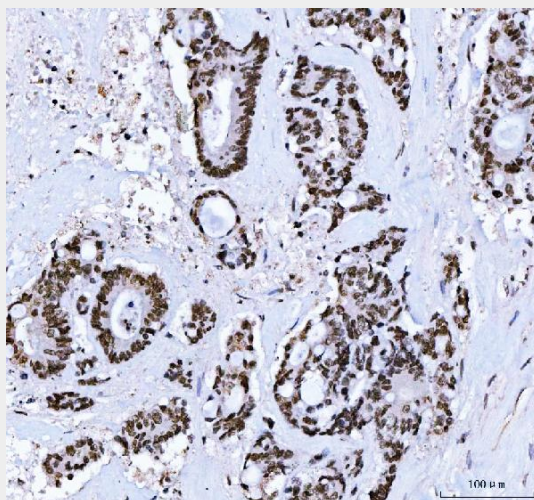


Figure 2. IHC analysis of CTBP2 using anti-CTBP2 antibody (M02567-3).

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 μ g/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.

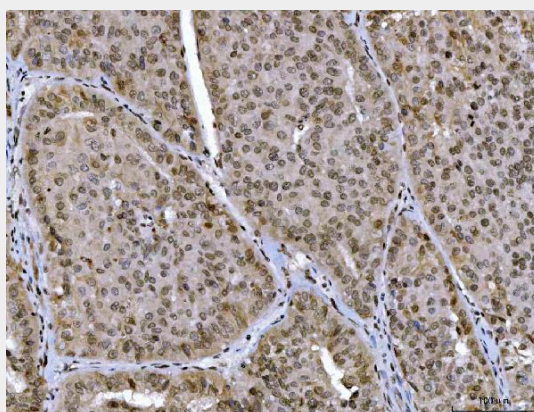


Figure 3. IHC analysis of CTBP2 using anti-CTBP2 antibody (M02567-3).

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 μ g/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.

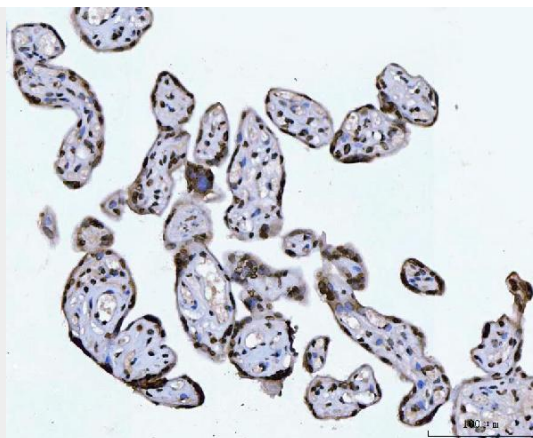


Figure 4. IHC analysis of CTBP2 using anti-CTBP2 antibody (M02567-3). CTBP2 was detected in a paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 μ g/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.

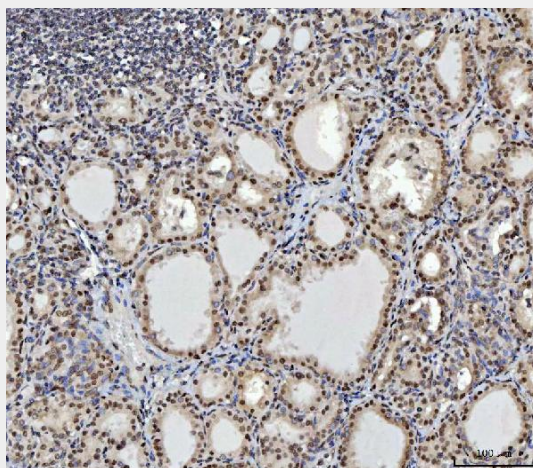


Figure 5. IHC analysis of CTBP2 using anti-CTBP2 antibody (M02567-3). CTBP2 was detected in a paraffin-embedded section of human thyroid cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 μ g/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.

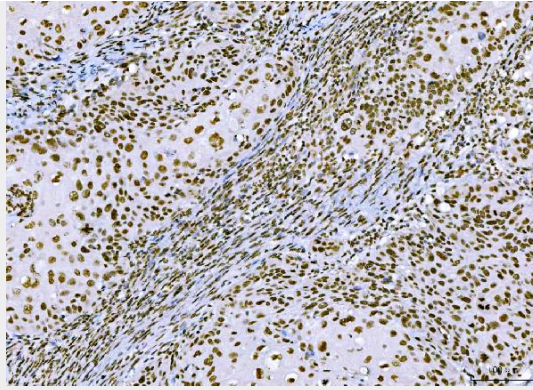


Figure 6. IHC analysis of CTBP2 using anti-CTBP2 antibody (M02567-3).

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.

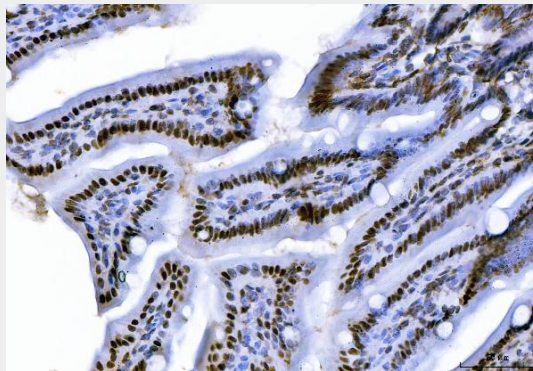


Figure 7. IHC analysis of CTBP2 using anti-CTBP2 antibody (M02567-3).

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.

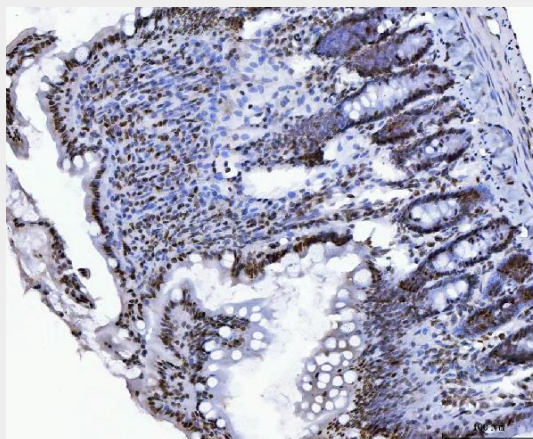


Figure 8. IHC analysis of CTBP2 using anti-CTBP2 antibody (M02567-3).

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.

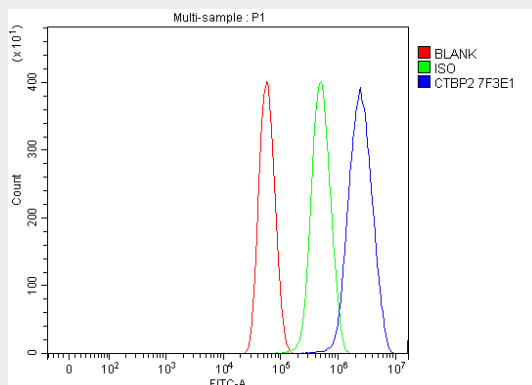


Figure 9. Flow Cytometry analysis of U87 cells using anti-CTBP2 antibody (M02567-3).

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/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10 µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 µg/1x10⁶) 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.