

Anti-DP1 Rabbit Monoclonal Antibody

Catalog # ABO15898

Specification

Anti-DP1 Rabbit Monoclonal Antibody - Product Information

Application WB, IHC, FC **Primary Accession** Q14186 Rabbit Host Isotype laG Reactivity Rat, Human, Mouse Clonality Monoclonal Format Liquid Description Anti-DP1 Rabbit Monoclonal Antibody . Tested in WB, IHC, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Anti-DP1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 7027

Other Names Transcription factor Dp-1, DRTF1-polypeptide 1, DRTF1, E2F dimerization partner 1, TFDP1, DP1

Calculated MW 50 kDa KDa

Application Details WB 1:500-1:2000
IHC 1:50-1:200
FC 1:50

Contents Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human DP1

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-DP1 Rabbit Monoclonal Antibody - Protein Information

Name TFDP1



Synonyms DP1

Function

Can stimulate E2F-dependent transcription. Binds DNA cooperatively with E2F family members through the E2 recognition site, 5'-TTTC[CG]CGC-3', found in the promoter region of a number of genes whose products are involved in cell cycle regulation or in DNA replication (PubMed:7739537, PubMed:8405995). The E2F1:DP complex appears to mediate both cell proliferation and apoptosis. Blocks adipocyte differentiation by repressing CEBPA binding to its target gene promoters (PubMed:20176812).

Cellular Location

Nucleus {ECO:0000250|UniProtKB:Q08639}. Cytoplasm {ECO:0000250|UniProtKB:Q08639}. Note=Shuttles between the cytoplasm and nucleus and translocates into the nuclear compartment upon heterodimerization with E2F1. {ECO:0000250|UniProtKB:Q08639}

Tissue Location

Highest levels in muscle. Also expressed in brain, placenta, liver and kidney. Lower levels in lung and pancreas. Not detected in heart

Anti-DP1 Rabbit Monoclonal Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-DP1 Rabbit Monoclonal Antibody - Images

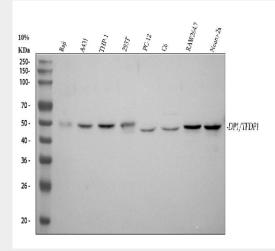


Figure 1. Western blot analysis of DP1 using anti-DP1 antibody (M04204).

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 Raji whole cell lysates,
- Lane 2: human A431 whole cell lysates,
- Lane 3: human THP-1 whole cell lysates,
- Lane 4: human 293T whole cell lysates,
- Lane 5: rat PC-12 whole cell lysates,
- Lane 6: rat C6 whole cell lysates,
- Lane 7: mouse RAW264.7 whole cell lysates,
- Lane 8: mouse Neuro-2a whole cell 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 rabbit anti-DP1 antigen affinity purified monoclonal antibody (Catalog # M04204) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:1000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for DP1 at approximately 50 kDa. The expected band size for DP1 is at 45 kDa.

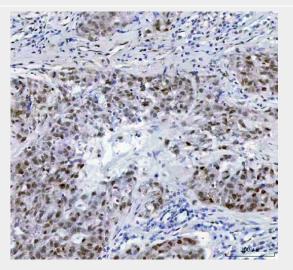


Figure 2. IHC analysis of DP1 using anti-DP1 antibody (M04204).

DP1 was detected in a paraffin-embedded section of human breast 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 1:50 rabbit anti-DP1 Antibody (M04204) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



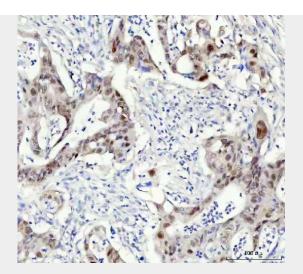


Figure 3. IHC analysis of DP1 using anti-DP1 antibody (M04204).

DP1 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 1:50 rabbit anti-DP1 Antibody (M04204) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.