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Anti-Ataxin 1 Antibody Picoband™ (monoclonal, 2B13G8)

Catalog # ABO16583

Product Information

Application	WB, IHC, FC
Primary Accession	P54253
Host	Mouse
Isotype	Mouse IgG2b
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Lyophilized
Description	Anti-Ataxin 1 Antibody Picoband™ (monoclonal, 2B13G8) . 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 □g/ml.

Additional Information

Gene ID	6310
Other Names	Ataxin-1, Spinocerebellar ataxia type 1 protein, ATXN1, ATX1, SCA1
Calculated MW	86923
Application Details	Western blot, 0.25-0.5 □g/ml, Human, Mouse, Rat Immunohistochemistry(Paraffin-embedded Section), 2-5 □g/ml, Human, Mouse, Rat Flow Cytometry, 1-3 □g/1x10^6 cells, Human, Mouse, Rat
Source	Eukaryota
Contents	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na2HPO4.
Clone Names	Clone: 2B13G8
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Ataxin 1, different from the related mouse and rat sequences by one amino acid.
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.

Protein Information

Name	ATXN1
Synonyms	ATX1, SCA1
Function	Chromatin-binding factor that repress Notch signaling in the absence of Notch intracellular domain by acting as a CBF1 corepressor. Binds to the HEY promoter and might assist, along with NCOR2, RBPJ- mediated repression. Binds RNA in vitro. May be involved in RNA metabolism (PubMed:21475249). In concert with CIC and ATXN1L, involved in brain development (By similarity).
Cellular Location	Cytoplasm. Nucleus Note=Colocalizes with USP7 in the nucleus
Tissue Location	Widely expressed throughout the body.

Background

Ataxin-1 is a protein that in humans is encoded by the ATXN1 gene. The ATXN1 gene had been mapped to 6p23 by in situ hybridization. Ataxin-1 (ATXN1), a causative factor for spinocerebellar ataxia type 1 (SCA1), and the related Brother of ATXN1 (BOAT1) are human proteins involved in transcriptional repression. ATXN1 and BOAT1 might participate in several Notch-controlled developmental and pathological processes.

Images

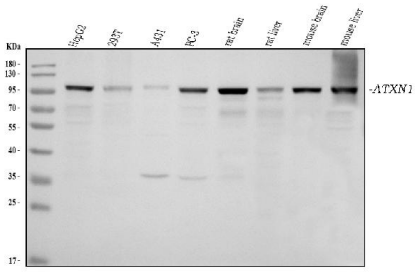
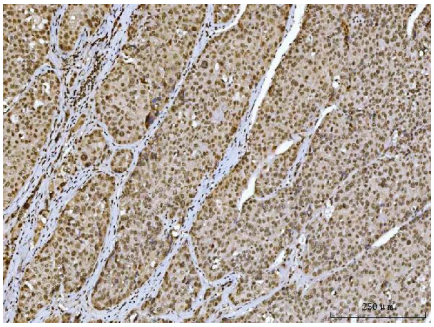


Figure 1. Western blot analysis of Ataxin 1 using anti-Ataxin 1 antibody (M01786-1).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human HepG2 whole cell lysates,
Lane 2: human 293T whole cell lysates,
Lane 3: human A431 whole cell lysates,
Lane 4: human PC-3 whole cell lysates,
Lane 5: rat brain tissue lysates,
Lane 6: rat liver tissue lysates,
Lane 7: mouse brain tissue lysates,
Lane 8: mouse liver 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-Ataxin 1 antigen affinity purified monoclonal antibody (Catalog # M01786-1) 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 Ataxin 1 at approximately 105 kDa. The expected band size for Ataxin 1 is at 87 kDa.

Figure 2. IHC analysis of Ataxin 1 using anti-Ataxin 1 antibody (M01786-1).
Ataxin 1 was detected in a paraffin-embedded section of human hepatocellular 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-Ataxin 1 Antibody (M01786-1) 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.

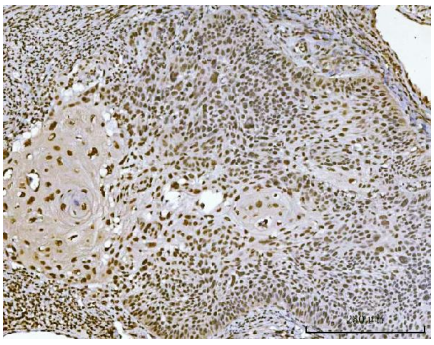


Figure 3. IHC analysis of Ataxin 1 using anti-Ataxin 1 antibody (M01786-1).
Ataxin 1 was detected in a paraffin-embedded section of human laryngeal squamous cell carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-Ataxin 1 Antibody (M01786-1) 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.

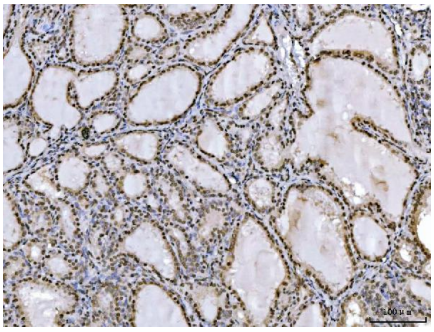


Figure 4. IHC analysis of Ataxin 1 using anti-Ataxin 1 antibody (M01786-1).
Ataxin 1 was detected in a paraffin-embedded section of human thyroiditis tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-Ataxin 1 Antibody (M01786-1) 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.

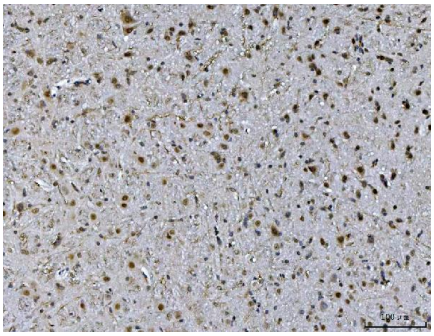


Figure 5. IHC analysis of Ataxin 1 using anti-Ataxin 1 antibody (M01786-1).
Ataxin 1 was detected in a paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-Ataxin 1 Antibody (M01786-1) 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 Ataxin 1 using anti-Ataxin 1 antibody (M01786-1).
Ataxin 1 was detected in a paraffin-embedded section of rat cerebellum 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-Ataxin 1 Antibody (M01786-1) 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.

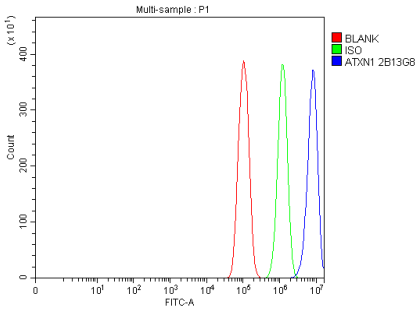


Figure 7. Flow Cytometry analysis of PC-3 cells using anti-Ataxin 1 antibody (M01786-1).
Overlay histogram showing PC-3 cells stained with M01786-1 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Ataxin 1 Antibody (M01786-1, 1 µg/1x10^6 cells) for 30 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.

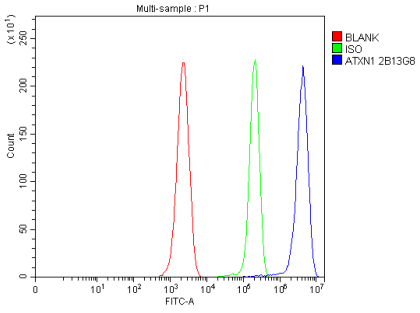


Figure 8. Flow Cytometry analysis of ANA-1 cells using anti-Ataxin 1 antibody (M01786-1).
Overlay histogram showing ANA-1 cells stained with M01786-1 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Ataxin 1 Antibody (M01786-1, 1 µg/1x10^6 cells) for 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.

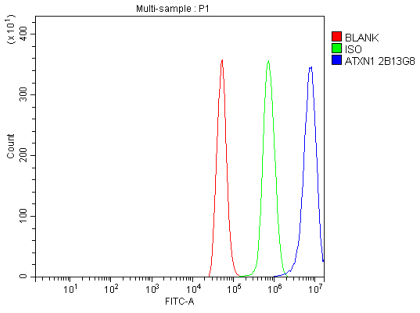


Figure 9. Flow Cytometry analysis of NRK cells using anti-Ataxin 1 antibody (M01786-1).
Overlay histogram showing NRK cells stained with M01786-1 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Ataxin 1 Antibody (M01786-1, 1 µg/1x10^6 cells) for 30 min 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.