

Anti-Ataxin 1 Antibody Picoband™ (monoclonal, 2B13G8)
Catalog # ABO16583**Specification****Anti-Ataxin 1 Antibody Picoband™ (monoclonal, 2B13G8) - 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 µg/ml.

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

Gene ID 6310

Other Names

Ataxin-1, Spinocerebellar ataxia type 1 protein, ATXN1, ATX1, SCA1

Calculated MW

105 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, Mouse, Rat

Contents

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

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.**

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

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

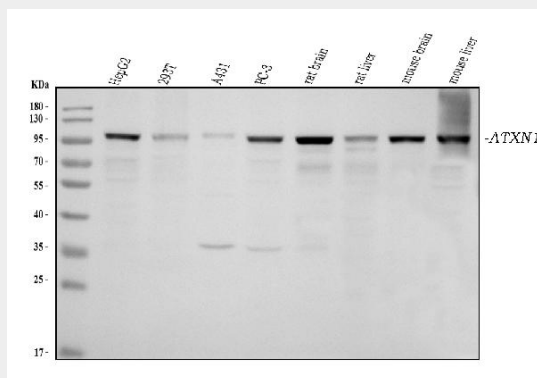


Figure 1. Western blot analysis of Ataxin 1 using anti-Ataxin 1 antibody (M01786-1).

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.

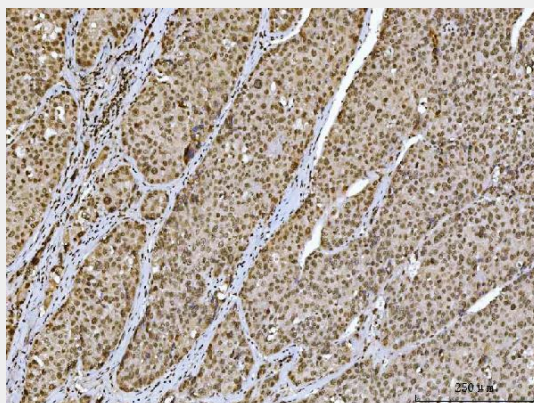


Figure 2. IHC analysis of Ataxin 1 using anti-Ataxin 1 antibody (M01786-1).

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.

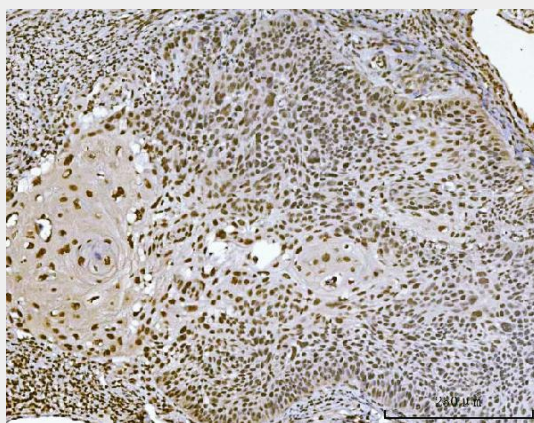


Figure 3. IHC analysis of Ataxin 1 using anti-Ataxin 1 antibody (M01786-1).

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.

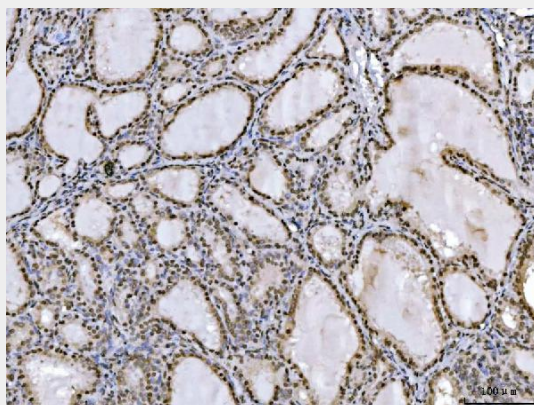


Figure 4. IHC analysis of Ataxin 1 using anti-Ataxin 1 antibody (M01786-1).

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.

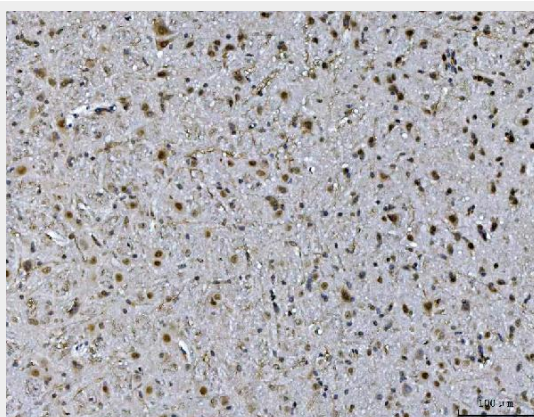


Figure 5. IHC analysis of Ataxin 1 using anti-Ataxin 1 antibody (M01786-1).

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 $\mu\text{g/ml}$ 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.

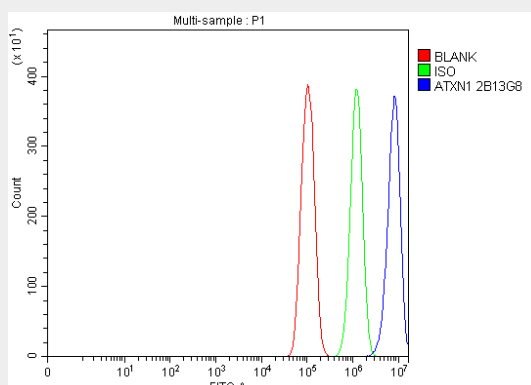


Figure 7. Flow Cytometry analysis of PC-3 cells using anti-Ataxin 1 antibody (M01786-1).

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 $\mu\text{g}/1 \times 10^6$ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10 $\mu\text{g}/1 \times 10^6$ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 $\mu\text{g}/1 \times 10^6$) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

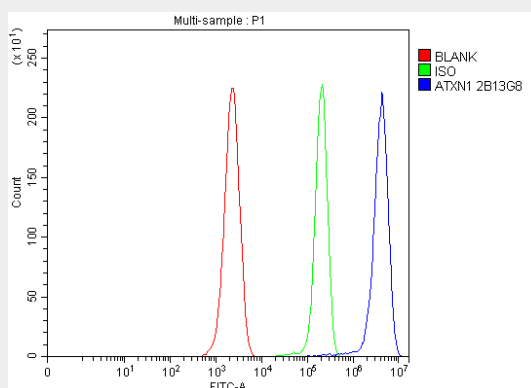


Figure 8. Flow Cytometry analysis of ANA-1 cells using anti-Ataxin 1 antibody (M01786-1).

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 $\mu\text{g}/1 \times 10^6$ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10 $\mu\text{g}/1 \times 10^6$ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 $\mu\text{g}/1 \times 10^6$) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

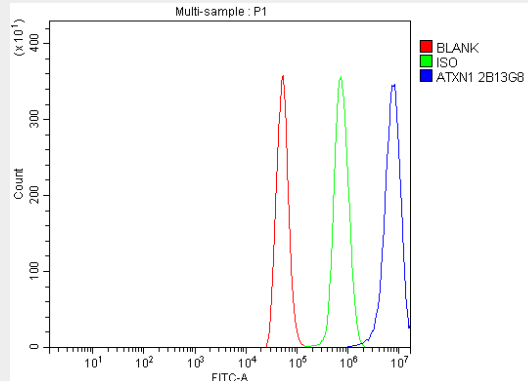


Figure 9. Flow Cytometry analysis of NRK cells using anti-Ataxin 1 antibody (M01786-1). Overlay histogram showing NRK cells stained with M01786-1 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Ataxin 1 Antibody (M01786-1, 1 $\mu\text{g}/1 \times 10^6$ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10 $\mu\text{g}/1 \times 10^6$ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 $\mu\text{g}/1 \times 10^6$) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

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