abcam

Product datasheet

Anti-n-Myc/MYCN antibody [EPR18982-8R-3] - ChIP Grade ab227822

Recombinant RabMAb

1 References 4 Images

Overview

Product name Anti-n-Myc/MYCN antibody [EPR18982-8R-3] - ChIP Grade

Description Rabbit monoclonal [EPR18982-8R-3] to n-Myc/MYCN - ChIP Grade

Host species Rabbit

Tested applications Suitable for: ChIP, WB, IP

Species reactivity Reacts with: Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: IMR-32 whole cell lysate. IP: IMR-32 whole cell lysate. ChIP: Chromatin prepared from IMR-

32 cells.

General notesThis product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

Long-term security of supplyAnimal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 0.05% BSA, 49% Glycerol (glycerin, glycerine), PBS

Purity Protein A purified

Clonality Monoclonal

Clone number EPR18982-8R-3

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Isotype IgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab227822 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ChIP		Use 5 µg for 25 µg of chromatin.
WB		1/1000. Detects a band of approximately 49-62 kDa (predicted molecular weight: 50 kDa).
IP		1/30.

Target

Function

May function as a transcription factor.

Involvement in disease

Note=Amplification of the N-MYC gene is associated with a variety of human tumors, most frequently neuroblastoma, where the level of amplification appears to increase as the tumor progresses.

Defects in MYCN are the cause of microcephaly-oculo-digito-esophageal-duodenal syndrome (MODED) [MIM:164280]; also known as oculodigitoesophagoduodenal syndrome (ODED). Microcephaly-oculo-digito-esophageal-duodenal syndrome is characterized by variable combinations of esophageal and duodenal atresias, microcephaly, learning disability and limb malformations. Cardiac and renal malformations, vertebral anomalies, and deafness have also been described.

Defects in MYCN are the cause of microcephaly and digital abnormalities with normal intelligence (MCPHDANI) [MIM:602585].

Sequence similarities

Contains 1 basic helix-loop-helix (bHLH) domain.

Developmental stage

Expressed during fetal development.

Cellular localization

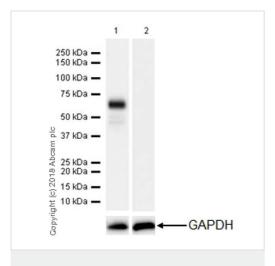
Nucleus.

Images



ChIP - Anti-n-Myc/MYCN antibody [EPR18982-8R-3] - ChIP Grade (ab227822)

Chromatin was prepared from IMR-32 cells according to the Abcam X-ChIP protocol. Cells were fixed with formaldehyde for 10min. The ChIP was performed with 25 µg of chromatin, 5 µg of ab227822 (red), and 20 µl of Protein A/G sepharose beads. 5 µg of rabbit normal IgG was added to the beads control (gray). The immunoprecipitated DNA was quantified by real time PCR (SYBR green approach). Primers and probes are located in the first kb of the transcribed region.



Western blot - Anti-n-Myc/MYCN antibody [EPR18982-8R-3] - ChIP Grade (ab227822) **All lanes :** Anti-n-Myc/MYCN antibody [EPR18982-8R-3] - ChIP Grade (ab227822) at 1/1000 dilution

Lane 1 : IMR-32 (human neuroblastoma neuroblast cell line) whole cell lysate

Lane 2 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

Predicted band size: 50 kDa Observed band size: 62 kDa

Exposure time: 103 seconds

Blocking and dilution buffer: 5% NFDM/TBST

The expression profile observed is consistent with what has been described in the literature (PMID: 11034201; PMID: 27197171;

PMID: 23792191).

Negative control: HeLa (PMID: 27197171).

n-Myc/MYCN was immunoprecipitated from 0.35 mg of IMR-32 (human neuroblastoma neuroblast cell line) whole cell lysate with ab227822 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab227822 at 1/500 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/1000 dilution.

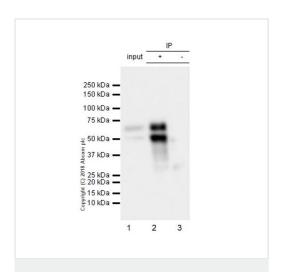
Lane 1: IMR-32 whole cell lysate 10 µg (Input).

Lane 2: ab227822 IP in IMR-32 whole cell lysate.

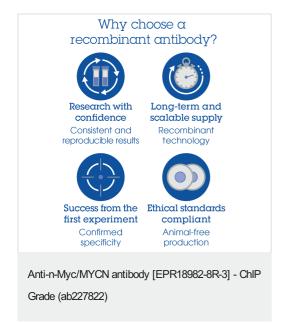
Lane 3: Rabbit monoclonal $\lg G$ ($\underline{ab172730}$) instead of ab227822 in IMR-32 whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST. Exposure time: 3 seconds.

The expression profile observed is consistent with what has been described in the literature (PMID: 17938259; PMID: 2657399).



Immunoprecipitation - Anti-n-Myc/MYCN antibody [EPR18982-8R-3] - ChIP Grade (ab227822)



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