abcam

ab16898

Anti-n-Myc/MYCN antibody [NCM II 100]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Constituents: 50% Glycerol (glycerin, glycerine), 0.82% Sodium phosphate
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Protein within Human MYCN. The exact immunogen used to generate this antibody is proprietary information. Database link P04198
Clone number	NCM II 100
Purity	Tissue culture supernatant
Specificity	This antibody reacts with N-myc/MYCN encoded proteins and their cleavage products.
Light chain type	kappa
Purification notes	Purified from TCS.

Reactivity data

IP

Tested

Species	Human
Dilution info	-

Notes	It is important to compensate for the short half life of this protein when preparing tissue sections or extracts. We recommended that all preparations be kept cold and that a cocktail of protease inhibitors be used.

Predicted

Species	Mouse
Dilution info	-
Notes	-

ChIP

Expected

Species	Mouse
Dilution info	-
Notes	Suggested to be used at 2 ug.

Species	Human
Dilution info	-
Notes	Suggested to be used at 2 ug.

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	It is important to compensate for the short half life of this protein when preparing tissue sections or extracts. We recommended that all preparations be kept cold and that a cocktail of protease inhibitors be used. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse
Dilution info	-

Notes	-

WB

Expected

Species	Mouse
Dilution info	-
Notes	See references.

Species	Human
Dilution info	-
Notes	See references.

ICC/IF

Expected

Species	Mouse
Dilution info	-
Notes	Pubmed ID: 2426708.

Species	Human
Dilution info	-
Notes	Pubmed ID: 2426708.

IHC-Fr

Expected

Species	Mouse
Dilution info	-
Notes	See references.

Species	Human
Dilution info	-
Notes	See references.

Target data

See full target information MYCN

Function	Positively regulates the transcription of MYCNOS in neuroblastoma cells.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

This product was changed from ascites to tissue culture supernatant on 17 May 2019. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	N-Myc also known as MYCN is a transcription factor encoded by the MYCN gene. It plays an important role in cell proliferation and differentiation. The n-Myc protein is part of the Myc family of transcription factors including c-Myc and c-Myb. n-Myc has a molecular weight of approximately 64 kDa. This protein expresses predominantly in developing tissues particularly in the brain but its expression is seen in other tissues during embryogenesis as well. This characteristic makes it important in early development and organ formation.
Biological function summary	N-Myc/MYCN functions in gene regulation by binding to E-box sequences in DNA facilitating transcription of genes essential for cellular growth and metabolism. n-Myc often forms a heterodimer with the MAX protein which enhances its DNA-binding capacity and transcriptional activity. This activity influences processes like apoptosis cell differentiation and cell cycle progression. The ncm mouse model a

	genetically engineered mouse with MYCN overexpression demonstrates the effects of deregulated n-Myc expression.
Pathways	MYCN significantly impacts the p53 signaling pathway and the Wnt signaling pathway. In the p53 signaling pathway n-Myc interacts with p53 and MDM2 regulating cell cycle checkpoints and apoptosis. In the Wnt pathway MYCN interplays with molecules like β-catenin to influence cell division and differentiation. These interactions highlight the role of n-Myc in maintaining cellular homeostasis and response to external signals that affect growth and division.
Associated diseases and disorders	N-Myc is closely linked to neuroblastoma and medulloblastoma aggressive forms of pediatric cancers. MYCN amplification often indicates a poor prognosis in neuroblastoma playing a role in tumor progression and resistance to therapy. In medulloblastoma overexpression of n-Myc partners with proteins like Aurora A kinase to promote oncogenesis. Targeting these protein interactions offers potential therapeutic strategies for these MYCN-related cancers.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

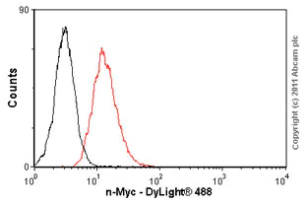
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

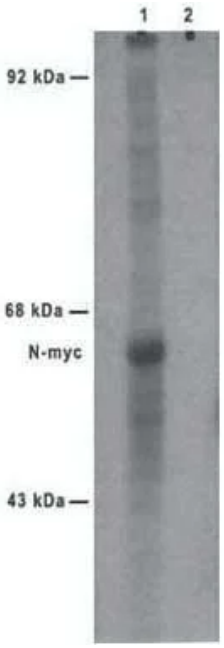
2 product images



Flow Cytometry - Anti-n-Myc/MYCN antibody [NCM II 100] (ab16898)

N-Myc/MYCN Flow Cytometry staining using mouse Anti-n-Myc/MYCN antibody

Overlay histogram showing SH-SY5Y cells stained with ab16898 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab16898, 0.5µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in SH-SY5Y cells fixed with 4% paraformaldehyde (10 min)/permeabilized in 0.1% PBS-Tween used under the same conditions.
This image was generated using the ascites version of the product.



Immunoprecipitation - Anti-n-Myc/MYCN antibody [NCM II 100] (ab16898)

Immunoprecipitation of N-Myc/MYCN from S35 methionine-labeled IMR-5 cells using ab16898 (lane 1) and Normal Mouse IgG (lane 2).
ab16898 used at 1 mg/sample.
This image was generated using the ascites version of the product.

All lanes:
Immunoprecipitation - Anti-n-Myc/MYCN antibody [NCM II 100] (ab16898)

Predicted band size: 50 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.