# abcam

## Product datasheet

## Anti-c-Myc (phospho T58) antibody [EPR17923] ab185655



重组 RabMAb

★★★★★ 1 Abreviews 15 References 6 图像

概述

产品名称 Anti-c-Myc (phospho T58)抗体[EPR17923]

描述 兔单克隆抗体[EPR17923] to c-Myc (phospho T58)

宿主 Rabbit

经测试应用 适用于: ICC/IF, WB, Flow Cyt (Intra), Dot blot

种属反应性 与反应: Human

预测可用于: Mouse, Rat 🔷

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

阳性对照 WB: HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate, HeLa cells

treated with 200nM Calyculin A and 1uM Okadaic Acid for 60 minutes whole cell lysate. ICC/IF:

HeLa cells. Flow Cyt (intra): HeLa cells

常规说明 This 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 supply

- Animal-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.

性能

形式

存放说明 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.

存储溶液 pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol, 0.05% BSA

纯度 Protein A purified

克隆 单克隆

**克隆编号** EPR17923

**同种型** IgG

## 应用

## The Abpromise guarantee Abpromise™承诺保证使用ab185655于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF		1/250.
WB	<b>★★★★</b> ☆ (1)	1/1000. Detects a band of approximately 57 kDa (predicted molecular weight: 49 kDa).
Flow Cyt (Intra)		1/700.
Dot blot		1/1000.

#### 靶标

功能 Participates in the regulation of gene transcription. Binds DNA in a non-specific manner, yet also

specifically recognizes the core sequence 5'-CAC[GA]TG-3'. Seems to activate the transcription

of growth-related genes.

疾病相关 Note=Overexpression of MYC is implicated in the etiology of a variety of hematopoietic tumors.

Note=A chromosomal aberration involving MYC may be a cause of a form of B-cell chronic

lymphocytic leukemia. Translocation t(8;12)(q24;q22) with BTG1.

Defects in MYC are a cause of Burkitt lymphoma (BL) [MIM:113970]. A form of undifferentiated malignant lymphoma commonly manifested as a large osteolytic lesion in the jaw or as an abdominal mass. Note=Chromosomal aberrations involving MYC are usually found in Burkitt lymphoma. Translocations t(8;14), t(8;22) or t(2;8) which juxtapose MYC to one of the heavy or

light chain immunoglobulin gene loci.

序列相似性 Contains 1 basic helix-loop-helix (bHLH) domain.

翻译后修饰 Phosphorylated by PRKDC. Phosphorylation at Thr-58 and Ser-62 by GSK3 is required for

ubiquitination and degradation by the proteasome.

Ubiquitinated by the SCF(FBXW7) complex when phosphorylated at Thr-58 and Ser-62, leading to its degradation by the proteasome. In the nucleoplasm, ubiquitination is counteracted by USP28, which interacts with isoform 1 of FBXW7 (FBW7alpha), leading to its deubiquitination and preventing degradation. In the nucleolus, however, ubiquitination is not counteracted by USP28, due to the lack of interaction between isoform 4 of FBXW7 (FBW7gamma) and USP28,

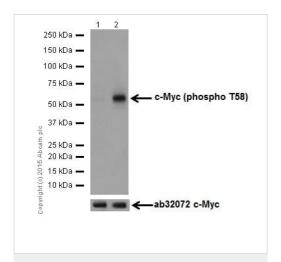
explaining the selective MYC degradation in the nucleolus. Also polyubiquitinated by the

DCX(TRUSS) complex.

细胞定位 Nucleus > nucleoplasm. Nucleus > nucleolus.

形式 c-Myc is also expressed in the cytoplasm.

图片



Western blot - Anti-c-Myc (phospho T58) antibody [EPR17923] (ab185655)

**All lanes :** Anti-c-Myc (phospho T58) antibody [EPR17923] (ab185655) at 1/5000 dilution

**Lane 1 :** Untreated HeLa (Human epithelial cell line from cervix adenocarcinoma ) whole cell lysate

Lane 2: HeLa (Human epithelial cell line from cervix adenocarcinoma) treated with 200nM Calyculin A and 1uM Okadaic Acid for 60 minutes whole cell lysate

Lysates/proteins at 10 µg per lane.

## Secondary

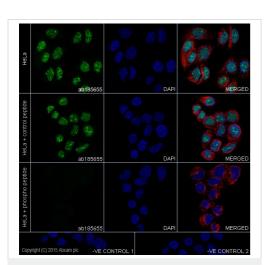
**All lanes :** Goat Anti-Rabbit lgG, (H+L),Peroxidase conjugated at 1/1000 dilution

Developed using the ECL technique.

**Predicted band size:** 49 kDa **Observed band size:** 57 kDa

Exposure time: 3 minutes

Blocking and diluting buffer was 5% NFDM /TBST



Immunocytochemistry/ Immunofluorescence - Antic-Myc (phospho T58) antibody [EPR17923] (ab185655)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa cells (Human epithelial cells from cervix adenocarcinoma) labeling c-Myc (phospho T58) with ab185655 at 1/250, followed by Goat anti-rabbit lgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/500 (green).

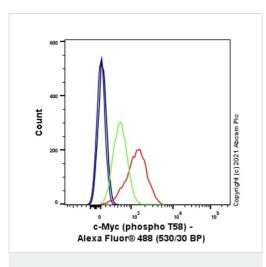
Confocal image showing nuclear staining on HeLa cells. The staining decreased after blocking with phospho peptide ( $100\mu g/ml$ ) overnight. The control peptide is a non-phospho peptide.

The nuclear counterstain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin antibody -Loading Control (ab7291) at 1/1000 dilution Goat Anti-Mouse lgG (AlexaFluor®594) preadsorbed (ab150120) at 1/500 (red).

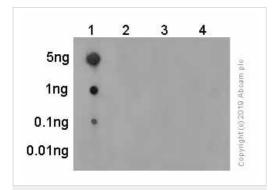
The negative controls are as follows:-

-ve control 1 - ab185655 at 1/500 followed by <u>ab150120</u> at 1/500. -ve control 2 -<u>ab7291</u> at 1/1000 followed by <u>ab150077</u> at 1/500.



Flow Cytometry (Intracellular) - Anti-c-Myc (phospho T58) antibody [EPR17923] (ab185655)

Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) treated with 200nM Calyculin A and 1uM Okadaic Acid for 60 min cells labeling c-Myc with purified ab185655 at 1/700 dilution (1 µg/mL) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit lgG (Alexa Fluor<sup>®</sup> 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal lgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Dot Blot - Anti-c-Myc (phospho T58) antibody [EPR17923] (ab185655)

Lane 1: c-Myc (phospho T58).

Lane 2: c-Myc (pT58) non-phospho peptide.

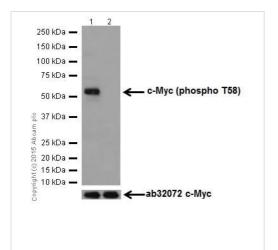
Lane 3: c-Myc (pS62) phospho peptide.

Lane 4: c-Myc (pS62) non-phospho peptide.

Dot blot analysis using ab185655 at a dilution of 1/1000. Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated (ab97051) was used as the secondary antibody at a dilution of 1/100000.

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 3 minutes.



Western blot - Anti-c-Myc (phospho T58) antibody [EPR17923] (ab185655)

**All lanes :** Anti-c-Myc (phospho T58) antibody [EPR17923] (ab185655) at 1/1000 dilution

**Lane 1 :** HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 2: HeLa (Human epithelial cell line from cervix adenocarcinoma) treated with Lambda Phosphatase whole cell lysate

Lysates/proteins at 10 µg per lane.

## Secondary

**All lanes :** Goat Anti-Rabbit lgG, (H+L),Peroxidase conjugated at 1/1000 dilution

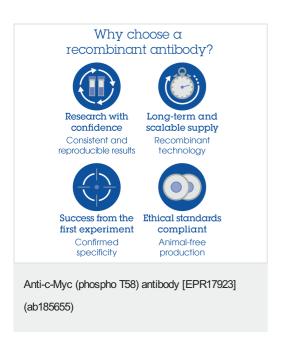
Developed using the ECL technique.

**Predicted band size:** 49 kDa **Observed band size:** 57 kDa

Exposure time: 3 minutes

Blocking and diluting buffer was 5% NFDM /TBST.

The strong band in Lane 1 of WB-2 compared to WB-1 is due to different lysate batches and a lower dilution factor (1:1000).



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