**Product datasheet**

**Anti-c-Myc antibody ab19233**

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### Overview

- **Product name**: Anti-c-Myc antibody
- **Description**: Chicken polyclonal to c-Myc
- **Host species**: Chicken
- **Tested applications**: Suitable for: Flow Cyt, ELISA, WB, ICC
- **Species reactivity**: Reacts with: Human
- **Immunogen**: Synthetic peptide: EQKLISEEDL conjugated to KLH, corresponding to amino acids 410-419 of Human c-Myc.

**Positive control**

- Purchase matching WB positive control: [Recombinant Human c-Myc protein](#)

### Properties

- **Form**: Liquid
- **Storage instructions**: Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
- **Storage buffer**: Preservative: 0.1% Sodium Azide
- **Purity**: Immunogen affinity purified
- **Clonality**: Polyclonal
- **Isotype**: IgY

### Applications

Our Abpromise guarantee covers the use of ab19233 in the following tested applications.

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

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.

**Involvement in disease**

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.

**Sequence similarities**

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

**Post-translational modifications**

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.

**Cellular localization**

Nucleus > nucleoplasm. Nucleus > nucleolus.

**Form**

c-Myc is also expressed in the cytoplasm.

### Application

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<th>Application</th>
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<th>Notes</th>
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| Flow Cyt    | ★★★★★    | Use at an assay dependent concentration.  
ab37382 - Chicken polyclonal IgY, is suitable for use as an isotype control with this antibody. |
| ELISA      |           | 1/100 - 1/500. |
| ICC        |           | 1/100 - 1/400. |

**Target**

**Function**

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**Images**

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Detection of c-myc-tagged Protein by Western Blot. Samples: 200, 100, or 50 ng of E. coli whole cell lysate expressing a multi-tag fusion protein. Antibodies: Affinity purified, chicken anti-c-myc antibody (ab19233) used for WB at 0.2 µg/ml (1:5,000). Detection: Chemiluminescence with an exposure time of 10 seconds.

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