

c-Myc Oncoprotein Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone MYC275 + MYC909]

Catalog # AH11941

Product Information

| | |
|-------------------|-----------------------------------------------|
| Application | IHC, IF, FC |
| Primary Accession | P01106 |
| Other Accession | 4609 , 202453 |
| Reactivity | Human |
| Host | Mouse |
| Clonality | Monoclonal |
| Isotype | Mouse / IgG1, kappa |
| Clone Names | MYC275 + MYC909 |
| Calculated MW | 50565 |

Additional Information

| | |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Gene ID | 4609 |
| Other Names | Myc proto-oncogene protein, Class E basic helix-loop-helix protein 39, bHLHe39, Proto-oncogene c-Myc, Transcription factor p64, MYC, BHLHE39 |
| Application Note | IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50 |
| Storage | Store at 2 to 8°C.Antibody is stable for 24 months. |
| Precautions | c-Myc Oncoprotein Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures. |

Protein Information

| | |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name | MYC |
| Synonyms | BHLHE39 |
| Function | Transcription factor that binds DNA in a non-specific manner, yet also specifically recognizes the core sequence 5'-CAC[GA]TG-3' (PubMed: 24940000 , PubMed: 25956029). Activates the transcription of growth-related genes (PubMed: 24940000 , PubMed: 25956029). Binds to the VEGFA promoter, promoting VEGFA production and subsequent sprouting angiogenesis (PubMed: 24940000 , PubMed: 25956029). Regulator of somatic reprogramming, controls self-renewal of embryonic stem cells (By similarity). Functions with TAF6L to activate target gene expression through RNA polymerase II pause release (By similarity). Positively regulates transcription of HNRNPA1, HNRNPA2 and PTBP1 which in turn regulate splicing of pyruvate kinase PKM by binding repressively to sequences flanking PKM exon 9, |

inhibiting exon 9 inclusion and resulting in exon 10 inclusion and production of the PKM M2 isoform (PubMed:[20010808](#)).

Cellular Location

Nucleus, nucleoplasm. Nucleus, nucleolus. Nucleus. Cytoplasm Chromosome. Note=Association with chromatin is reduced by hyperphosphorylation (PubMed:30158517) Localization to the nucleolus is dependent on HEATR1 (PubMed:38225354)

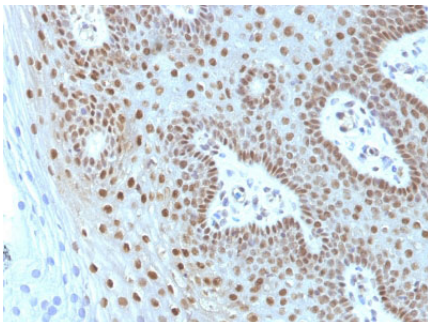
Background

It recognizes a transcription factor of 64-67kDa, identified as c-myc. This MAb shows no cross-reaction with v-myc. c-myc is involved in the control of cell proliferation and differentiation and is amplified and/or over-expressed in a variety of tumors. Over-expression of c-myc protein occurs frequently in luminal cells of prostate intraepithelial neoplasia as well as in most primary carcinomas and metastatic disease. Rearrangement of the MYC gene is found in 3% to 16% of diffuse large B-cell lymphoma (DLBCL s) and in nearly 100% of Burkitt lymphomas (BL). Identifying MYC status is important in establishing final diagnosis of DLBCL, BL, or B-cell lymphoma, with features intermediate between DLBCL and BL as well as in differential diagnoses of the lymphomas.

References

Evan GI, et. al. Molecular and Cellular Biology, 1985, 5(12):3610-6

Images



Formalin-fixed, paraffin-embedded human Cervical Carcinoma stained with c-myc Monoclonal Antibody (MYC275 + MYC909).

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