

Alexa Fluor® 594 Anti-Myc tag antibody [9E10] ab223894

1 Image

Overview

Product name	Alexa Fluor® 594 Anti-Myc tag antibody [9E10]
Description	Alexa Fluor® 594 Mouse monoclonal [9E10] to Myc tag
Host species	Mouse
Conjugation	Alexa Fluor® 594. Ex: 590nm, Em: 617nm
Specificity	This antibody is specific for Myc tagged proteins. The Myc tag epitope (EQKLISEEDL) is located at the dimerization site of c-myc and therefore this antibody does not perform well at recognizing endogenous c-myc. A publication by Baker AM et al. 2016 (PMID: 26826706 DOI: 10.1111/his.12939) shows the IHC staining generated by the 9E10 clone does not correlate with c-myc mRNA expression.
Tested applications	Suitable for: ICC/IF
Species reactivity	Reacts with: Species independent
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Epitope	aa 410-419 of human Myc.
Positive control	ICC/IF: 293T cells transfected with TMEM119 with myc tag
General notes	<p>Alexa Fluor® is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor® dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor® dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor® dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: (i) in manufacturing; (ii) to provide a service, information, or data in return for payment (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are sold for use in research. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@thermofisher.com.</p>

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

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. Store In the Dark.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
Purity	IgG fraction
Clonality	Monoclonal
Clone number	9E10
Myeloma	Sp2/0
Isotype	IgG1
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab223894 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
ICC/IF		1/100. This product gave a positive signal in 293T cells transfected with TMEM119 with myc tag fixed with 4% formaldehyde (10 min)

Target

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.

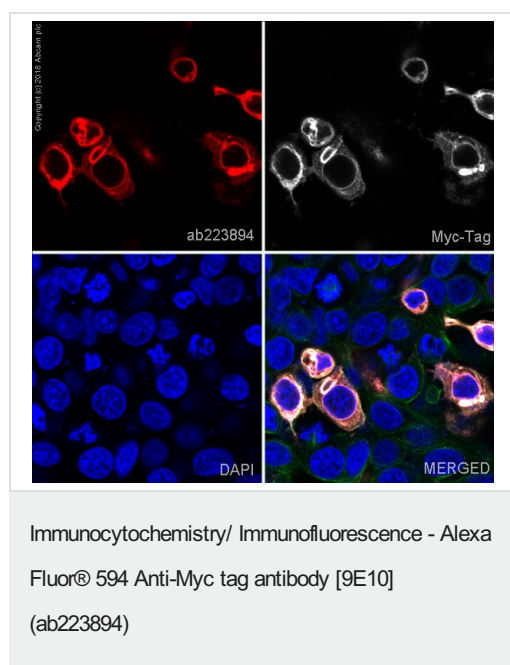
Cellular localization

Nucleus > nucleoplasm. Nucleus > nucleolus.

Form

c-Myc is also expressed in the cytoplasm.

Images



ab223894 staining Myc-tag (**pseudocolored in red**) in 293T cells transfected with TMEM119 with myc tag. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab223894 at 1/100 dilution and **ab195887**, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 488), at 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue) and Alexa Fluor® 647 conjugated control Myc-tag antibody (different clone) is **pseudocolored in white**.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

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