

AP09406PU-S**Polyclonal Antibody to MYB - Aff - Purified****Alternate names:**

Proto-oncogene c-Myb, Transcriptional activator Myb, c-Myb

Quantity:

25 µl

Concentration:

1.0 mg/ml (by UV absorbance at 280 nm)

Background:

The transcription factor c-Myb plays an important role in the development of all hematopoietic lineages during definitive hematopoiesis. Its critical role in hematopoiesis has been first demonstrated in experiments with targeted disruption of the c-Myb gene where deletion of both alleles of the c-Myb gene was embryonally lethal due to severe anemia. c-Myb is a short-lived sequence specific DNA-binding protein that regulates transcription of several important genes involved directly in cellular processes such as proliferation, differentiation, and apoptosis. Posttranslational modifications such as phosphorylation, acetylation, ubiquitination, and conjugation of SUMO proteins are crucial for modulation of the transactivation activity of c-Myb.

Uniprot ID:[P06876](#)**NCBI:**[NP_001185843.1](#)**GeneID:**[17863](#)**Host / Isotype:**

Rabbit / IgG

Immunogen:

Peptide corresponding to an internal portion of the c-Myb protein

Format:**State:** Liquid purified Ig**Purification:** Affinity chromatography**Buffer System:** 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 containing 0.01% (w/v) Sodium Azide**Applications:**

ELISA: 1/10,000 – 1/25,000.

Western Blot: 1/250 – 1/1000.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

This antibody reacts with endogenous c-Myb protein and also SUMOylated overexpressed c-Myb protein in transfected Cos7 cells.

Species: Rat, Mouse, Porcine, Human, Horse, Platypus, Opossum, Orangutan, Spider monkey, Bonobo, Gorilla, Chimpanzee.

Other species not tested.

Storage: Store the antibody at -20°C.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

Storage Conditions for Trial Size:

This vial contains a relatively low volume of reagent (25 µl). To minimize loss of volume dilute 1:10 by adding 225 µl of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below.

Shelf life: 3 month from despatch.

General Readings:

1. Sramko M, Markus J, Kabát J, Wolff L, Bies J. Stress-induced inactivation of the c-Myb transcription factor through conjugation of SUMO-2/3 proteins. J Biol Chem. 2006 Dec 29;281(52):40065-75. Epub 2006 Oct 30. PubMed PMID: 17077080.
2. Bies J, Markus J, Wolff L. Covalent attachment of the SUMO-1 protein to the negative regulatory domain of the c-Myb transcription factor modifies its stability and transactivation capacity. J Biol Chem. 2002 Mar 15;277(11):8999-9009. Epub 2002 Jan 4. PubMed PMID: 11779867.

Pictures:

Western blot using affinity purified anti-C-Myb antibody in Cos7 cell lysates: Lane 1: vector; Lane 2: transfected with c-myb, no treatment; Lane 3: transfected with c-Myb and heat stress-treated (incubation at 42°C for 30 minutes) to induce c-Myb modification. Lane 3 shows detection of bands at 75, 98, and 125kDa corresponding to overexpressed c-Myb (arrows): wild-type, with one attached SUMO molecule, and with two attached SUMO molecules, respectively. Nitrocellulose 0.45µm membrane was blocked for 1 hr at RT in 10% BLOTTO in PBS. The primary antibody was used at 1:500.

