

DESCRIPTION

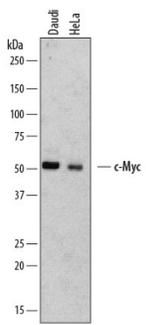
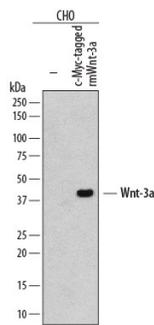
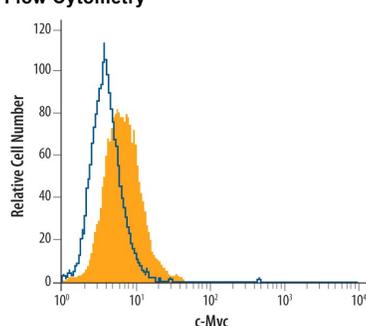
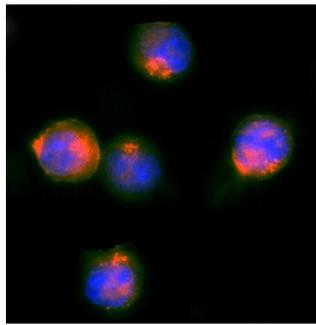
Species Reactivity	Human
Specificity	Detects endogenous human c-Myc and c-Myc tagged proteins in Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 9E10
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	C-terminal region peptide of human c-Myc Ala408-Ala439 Accession # P01106
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

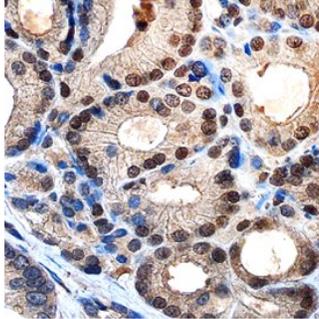
Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	2 µg/mL	See Below
Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
Immunocytochemistry	8-25 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	
Immunoprecipitation	Fan H, <i>et al.</i> (1998) <i>Biochem. Cell. Biol.</i> 76 :125.	

DATA

<p>Western Blot</p>  <p>Detection of Human c-Myc by Western Blot. Western blot shows lysates of Daudi human Burkitt's lymphoma cell line and HeLa human cervical epithelial carcinoma cell line. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human c-Myc Monoclonal Antibody (Catalog # MAB3696) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for c-Myc at approximately 52 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Western Blot</p>  <p>Detection of c-Myc-tagged Protein by Western Blot. Western blot shows lysates of CHO Chinese hamster ovary cell line either mock transfected (-) or transfected with c-Myc-tagged recombinant mouse Wnt-3a. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human c-Myc Monoclonal Antibody (Catalog # MAB3696) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for c-Myc-tagged recombinant mouse Wnt-3a at approximately 41 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>
<p>Flow Cytometry</p>  <p>Detection of c-Myc in Jurkat Human Cell Line by Flow Cytometry. Jurkat human acute T cell leukemia cell line was stained with Mouse Anti-Human c-Myc Monoclonal Antibody (Catalog # MAB3696, filled histogram) or isotype control antibody (Catalog # MAB002, open histogram), followed by Phycoerythrin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0102B). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with methanol.</p>	<p>Immunocytochemistry</p>  <p>c-Myc in HEK293 Human Cell Line Transfected with c-Myc-tagged Serotonin Receptor. c-Myc was detected in immersion fixed HEK293 human embryonic kidney cell line transfected with c-Myc-tagged Serotonin Receptor using Mouse Anti-Human c-Myc Monoclonal Antibody (Catalog # MAB3696) at 25 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to nuclei. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>

Immunohistochemistry



c-Myc in Human Prostate. c-Myc was detected in immersion fixed paraffin-embedded sections of human prostate using Mouse Anti-Human c-Myc Monoclonal Antibody (Catalog # MAB3696) at 3 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei of epithelial cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Human c-Myc is a helix-loop-helix transcription factor which efficiently binds DNA after heterodimerization with the bHLH protein Max. It is often overexpressed and mutated in hematopoietic tumors. Mutations frequently result in truncation around amino acid (aa) 252, before the C-terminal DNA binding, HLH and leucine zipper domains. The 439 aa human c-Myc has one O-glycosylation site and has three Ser/Thr phosphorylation sites near the N-terminus. Human c-Myc shows 92% aa identity with mouse or rat c-Myc.