POLR2A Monoclonal Antibody (8WG16)

Product Details	
Size	200 µg
Species Reactivity	Human, Many, Mouse, Rat
Published Species	Human
Host/Isotype	Mouse / IgG2a
Class	Monoclonal
Type	Antibody
Clone	8WG16
Conjugate	Unconjugated
Immunogen	Purified wheat germ RNA polymerase II.
Form	Liquid
Concentration	1.0 mg/mL
Purification	Protein G
Storage buffer	PBS, pH 7.4
Contains	no preservative
Storage conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_1087144

Applications	Tested Dilution	Publications
Western Blot (WB)	1-10 µg/mL	-
Immunocytochemistry (ICC/IF)	5 µg/mL	-
ChIP assay (ChIP)	5 µg/10^6 cells	1 Publication

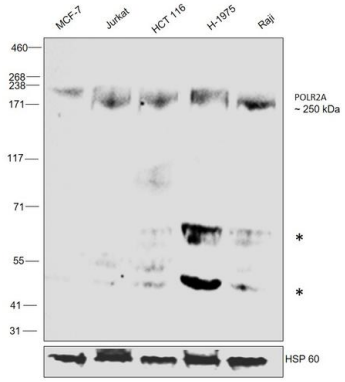
Product Specific Information

MA1-10882 detects RNA Polymerase II from eukaryotic samples.

MA1-10882 has been successfully used in Western blot applications.

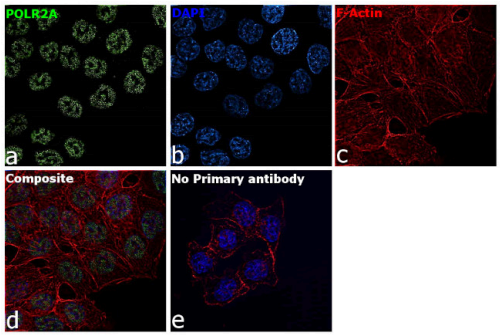
The MA1-10882 immunogen is purified wheat germ RNA polymerase II.

Product Images For POLR2A Monoclonal Antibody (8WG16)



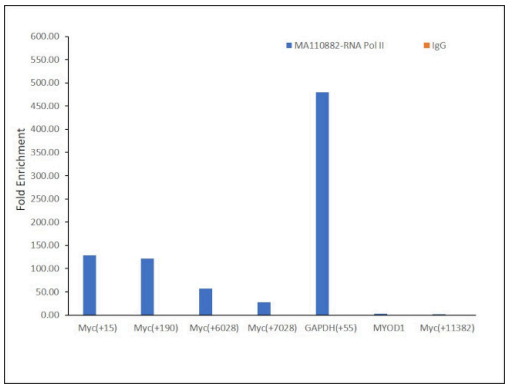
POLR2A Antibody (MA1-10882) in WB

Western blot was performed using Anti-POLR2A Monoclonal Antibody (8WG16) (Product # MA1-10882) and a 250 kDa bands along with uncharacterized bands (*) corresponding to POLR2A was observed across cell lines tested. Nuclear enriched extracts (40 µg lysate) of MCF7 (Lane 1), Jurkat (Lane 2), HCT 116 (Lane 3), H-1975 (Lane 4) and Raji (Lane 5) were electrophoresed using NuPAGE™ 3-8% Tris-Acetate Protein Gel (Product # EA0378BOX). Resolved proteins were equilibrated with 20% ethanol then transferred onto a nitrocellulose membrane (Product # IB23002) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1 µg/mL) and detected by chemiluminescence with Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A28177,1:20000 dilution using the iBright™ FL1500 Imaging System (Product # A44115). Chemiluminescent detection was performed using SuperSignal™ West Pico PLUS Chemiluminescent Substrate (Product # 34580).



POLR2A Antibody (MA1-10882) in ICC/IF

Immunofluorescence analysis of POLR2A Monoclonal Antibody (8WG16) was performed using 70% confluent log phase HCT 116 cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 2% BSA for 45 minutes at room temperature. The cells were labeled with POLR2A Monoclonal Antibody (8WG16) (Product # MA1-10882) at 5 µg/mL in 0.1% BSA, incubated at 4 degree celsius overnight and then labeled with Donkey anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 488 (Product # A32766), (1:2000 dilution), for 45 minutes at room temperature (Panel a: Green). Nuclei (Panel b:Blue) were stained with ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). F-actin (Panel c: Red) was stained with Rhodamine Phalloidin (Product # R415, 1:300 dilution). Panel d represents the merged image showing Nuclear localization. Panel e represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.



POLR2A Antibody (MA1-10882) in ChIP

Chromatin Immunoprecipitation (ChIP) was performed using POLR2A Monoclonal Antibody (8WG16) (Product # MA1-10882, 5 µg) on sheared chromatin from a million HCT 116 cells using the MAGnify ChIP System (Product # 49-2024). Normal Mouse IgG was used as a negative IP control. The purified DNA was analyzed by qPCR with PCR primer pairs over Myc and GAPDH genes (active), and MYOD1 and Myc (+11382) (inactive). Antibody specificity was demonstrated by detection of enrichment of the target protein at specific gene loci. Data is presented as fold enrichment of the antibody signal versus the Mouse Isotype using the comparative CT method.

1 Reference

ChIP assay (1)

Molecular cancer research : MCR

S100A14: novel modulator of terminal differentiation in esophageal cancer.

"MA1-10882 was used in ChIP assay to study the role of S100A14 in esophageal cancer terminal differentiation"

Authors: Chen H,Ma J,Sunkel B,Luo A,Ding F,Li Y,He H,Zhang S,Xu C,Jin Q,Wang Q,Liu Z

Year
2013

Species
Human