Product Name: **POLR2A Mouse Monoclonal Antibody**
Catalog #: **AMM86083**
For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in PBS with 0.05% sodium azide.
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:1000-1:2000
Molecular Weight	217.2kDa

Antigen Information

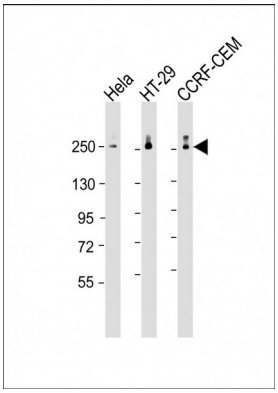
Gene Name	POLR2A (monoclonal) (M01AA)
Alternative Names	DNA-directed RNA polymerase II subunit RPB1, RNA polymerase II subunit B1, 2.7.7.6, DNA-directed RNA polymerase II subunit A, DNA-directed RNA polymerase III largest subunit, RNA-directed RNA polymerase II subunit RPB1, 2.7.7.48, POLR2A, POLR2
Gene ID	5430.0
SwissProt ID	P24928
Immunogen	This POLR2A antibody is generated from a mouse immunized with a KLH conjugated synthetic peptide between 340-566 amino acids from human POLR2A.

Background

DNA-dependent RNA polymerase catalyzes the transcription of DNA into RNA using the four ribonucleoside triphosphates as substrates. Largest and catalytic component of RNA polymerase II which synthesizes mRNA precursors and many functional non-coding RNAs. Forms the polymerase active center together with the second largest subunit. Pol II is the central component of the basal RNA polymerase II transcription machinery. It is composed of mobile elements that move relative to each other. RPB1 is part of the core element with the central large cleft, the clamp element that moves to open and close the cleft and the jaws that are thought to grab the incoming DNA template. At the start of transcription, a single-stranded DNA template strand of the promoter is positioned within the central active site cleft of Pol II. A bridging helix emanates from RPB1 and crosses the cleft near the catalytic site and is thought to promote translocation of Pol II by acting as a ratchet that moves the RNA-DNA hybrid through the active site by switching from straight to bent conformations at each step of nucleotide addition. During transcription elongation, Pol II moves on the template as the transcript elongates. Elongation is influenced by the phosphorylation status of the C-terminal domain (CTD) of Pol II largest subunit (RPB1), which serves as a platform for assembly of factors that regulate transcription initiation, elongation, termination and mRNA processing. Acts as an RNA- dependent RNA polymerase when associated with small delta antigen of Hepatitis delta virus, acting both as a replicate and transcriptase for the viral RNA circular genome.

Research Area

Image Data



All lanes : Anti-POLR2A Antibody (monoclonal) (M01AA) at 1:2000 dilution