

产品名称: Phospho-POLR2A (S2) (1B7) Rabbit Monoclonal Antibody
产品货号: AMRe05979

产品概述 (Summary)

产品名称 (Production Name)	Phospho-POLR2A (S2) (1B7) Rabbit Monoclonal Antibody
描述 (Description)	Recombinant rabbit monoclonal antibody
宿主 (Host)	Rabbit
应用 (Application)	WB,IHC,ICC/IF,FC,IP
种属反应性 (Reactivity)	Human,Mouse,Rat

产品性能 (Performance)

偶联物 (Conjugation)	Unconjugated
修饰 (Modification)	Phosphorylated
同种型 (Isotype)	IgG
克隆 (Clonality)	Monoclonal
形式 (Form)	Liquid
存放说明 (Storage)	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
储存溶液 (Buffer)	Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% New type preservative N and 0.05% protective protein.
纯化方式 (Purification)	Affinity purification

免疫原信息 (Immunogen)

基因名 (Gene Name)	POLR2A
别名 (Alternative Names)	POLR2A; POLR2; RNA polymerase II CTD repeat YSPTSPS;
基因 ID (Gene ID)	5430.0
蛋白 ID (SwissProt ID)	P24928.A synthetic phosphopeptide corresponding to residues surrounding Ser2 of human RNA polymerase II CTD repeat YSPTSPS

产品应用 (Application)

稀释比 (Dilution Ratio)	WB 1:500-1:2000,IHC 1:200-1:2000,ICC/IF 1:200-1:500,FC 1:200-1:500,IP 1:20-1:50
蛋白分子量 (Molecular Weight)	192kDa

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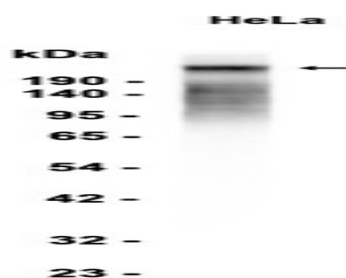
研究背景 (Background)

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. 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. Regulation of gene expression levels depends on the balance between methylation and acetylation levels of the CTD-lysines (By similarity). Initiation or early elongation steps of transcription of growth-factors-induced immediate early genes are regulated by the acetylation status of the CTD (PubMed: <http://www.uniprot.org/citations/24207025> target="_blank">24207025). Methylation and dimethylation have a repressive effect on target genes expression (By similarity).

研究领域 (Research Area)

Epigenetics and Nuclear Signaling

图片 (Image Data)



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Western blot analysis of extracts from HeLa cells using RM5247 at 1:1000.

注意事项 (Note)

For research use only .