

## RNA Polymerase II CTD Repeat YSPTSPS (Phospho S5) Antibody

Mouse Monoclonal Antibody [Clone CTD 8A7]

Catalog No	Format	Size
5430-MSM2-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
5430-MSM2-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
5430-MSM2-P1BX	Purified Ab WITHOUT BSA at 1.0mg/ml	100 ug

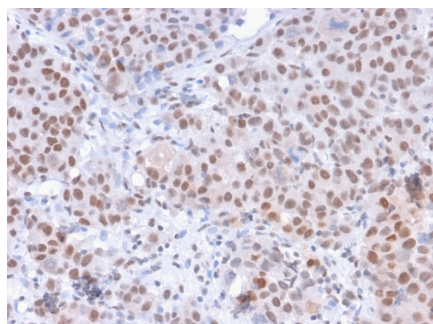
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

### Product Details

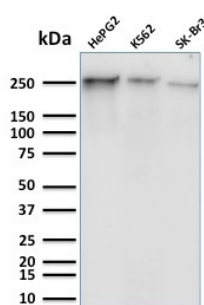
<b>Clone</b>	CTD 8A7
<b>Gene Name</b>	POLR2A
<b>Immunogen</b>	Ten repeats of synthetic peptide YSPTSPS using chemically synthesized phospho-Ser5
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgM / Kappa
<b>Mol. Weight of Antigen</b>	192-253kDa
<b>Cellular Localization</b>	Chromosome, Cytoplasm, Nucleus
<b>Species Reactivity</b>	Human, Saccharomyces Cerevisiae
<b>Positive Control</b>	HAP1, HePG2, K562, NIH3T3 cells. Human testis., PC3

\*Optimal dilution for a specific application should be determined.

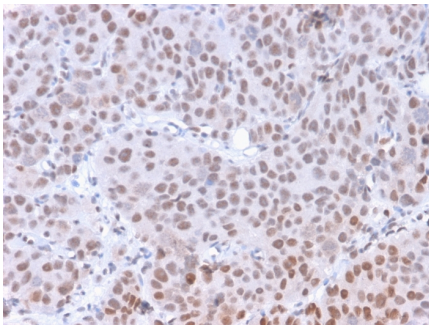
### Product Images for RNA Polymerase II CTD Repeat YSPTSPS (Phospho S5) Antibody



Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with RNA Polymerase II / Pol II Mouse Monoclonal Antibody (8A7).



Western Blot Analysis of HepG2, K562 and SK-Br3 cell lysates using RNA Pol II Mouse Monoclonal Antibody (8A7).



Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with RNA Polymerase II / Pol II Mouse Monoclonal Antibody (8A7).

### Specificity & Comments

RNA polymerase II (Pol II) is an enzyme that is composed of 12 subunits and is responsible for the transcription of protein-coding genes. Transcription initiation requires Pol II-mediated recruitment of transcription machinery to a target promoter, thereby allowing transcription to begin. The largest subunit of Pol II (referred to as RPB1 or RPB205) is a 1,840 amino acid protein that contains one C2H2-type zinc finger and a C-terminal domain comprised of several heptapeptide repeats. Although Pol II function requires the cooperation of all twelve subunits, the largest subunit conveys Pol II catalytic activity and, together with the second largest subunit, forms the active center of the Pol II enzyme. Additionally, the large subunit participates in forming the DNA-binding domain of Pol II, a groove that is necessary for transcription of the DNA template. Without proper function of the large subunit, mRNA synthesis and subsequent transcription elongation cannot occur.

### Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

### Supplied As

200ug/ml of Ab Purified from Bioreactor Concentrate. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

### Research Areas

Cardiovascular, Developmental Biology, Infectious Disease, Signal Transduction, Transcription Factors