

### 36-2954: Anti-RNA Polymerase II CTD Repeat YSPTSPS (Phospho S5) Monoclonal Antibody(Clone: CTD 8A7)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	CTD 8A7
<b>Application :</b>	FACS,IF,WB,IHC
<b>Reactivity :</b>	Human
<b>Gene :</b>	POLR2A
<b>Gene ID :</b>	5430
<b>Uniprot ID :</b>	P24928
<b>Alternative Name :</b>	DNA-directed RNA polymerase II largest subunit RNA polymerase II 220 kd subunit; DNA-directed RNA polymerase II subunit RPB1; hRPB220; hsRPB1; POLR2; Polr2a; POLRA; Polymerase (RNA) II (DNA directed) polypeptide A 220kDa; RNA polymerase II subunit B1; RPBh1; RplILS; RPO2; RPOL2
<b>Isotype :</b>	Mouse IgM, kappa
<b>Immunogen Information :</b>	Ten repeats of synthetic peptide YSPTSPS using chemically synthesized phospho-Ser5

#### Description

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.

#### Product Info

<b>Amount :</b>	20 µg / 100 µg
<b>Content :</b>	200 µg/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.
<b>Storage condition :</b>	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.

#### Application Note

Flow Cytometry (1-2ug/million cells); Immunofluorescence (1-2ug/ml); Western Blot (1-2ug/ml); Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 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);

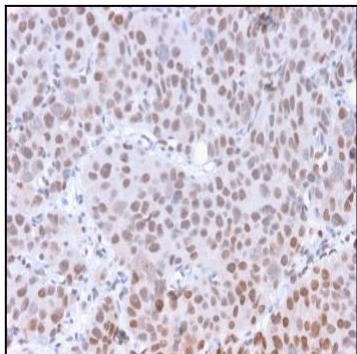


Fig. 1: Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with RNA Polymerase II / Pol II Mouse Monoclonal Antibody (8A7).

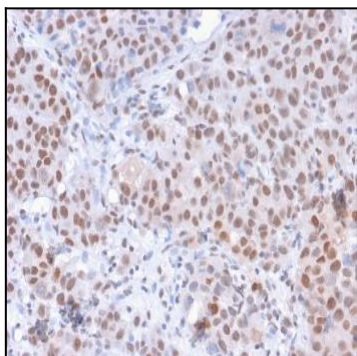


Fig. 2: Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with RNA Polymerase II / Pol II Mouse Monoclonal Antibody (8A7).

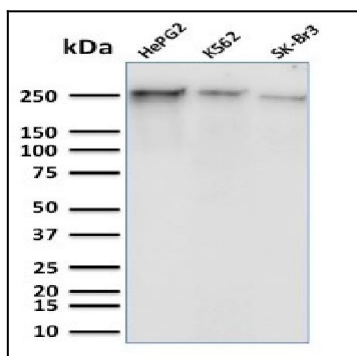


Fig. 3: Western Blot Analysis of Human HepG2, K562 and SK-Br3 cell lysates using RNA Pol II Mouse Monoclonal Antibody (8A7).