

36-2953: Anti-RNA Polymerase II Monoclonal Antibody(Clone: CTD4H8)

Clonality :	Monoclonal
Clone Name :	CTD4H8
Application :	FACS,IF,WB,IHC
Reactivity :	Human, Mouse, Rat
Gene :	POLR2A
Gene ID :	5430
Uniprot ID :	P24928
Alternative Name :	DNA-directed RNA polymerase II largest subunit RNA polymerase II 220kd 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
Isotype :	Mouse IgG1, kappa
Immunogen Information :	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

Amount :	20 µg / 100 µg
Content :	200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage condition :	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);

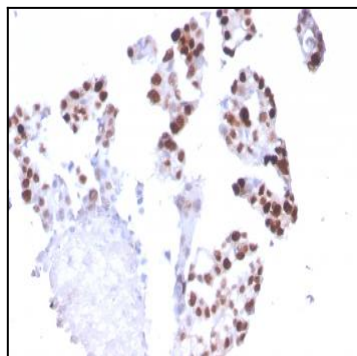


Fig. 1: Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with RNA Polymerase II / Pol II Mouse Monoclonal Antibody (CTD4H8).

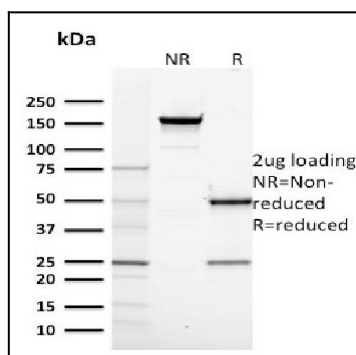


Fig. 2: SDS-PAGE Analysis Purified RNA Pol II Mouse Monoclonal Antibody (CTD4H8). Confirmation of Purity and Integrity of Antibody.

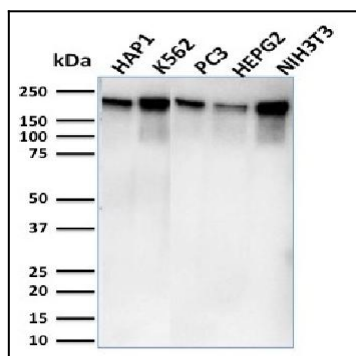


Fig. 3: Western Blot Analysis of Human HAP1, K562, PC3, HePG2 & NIH3T3 cell lysates using RNA Pol II Mouse Monoclonal Antibody (CTD4H8).