



# RNA Polymerase II; Clone CTD4H8 (Concentrate)

Availability/Contents:	<u>Item #</u>	<u>Volume</u>
	RA0679-C.1	0.1 ml
	RA0679-C.5	0.5 ml
	RA0679-C1	1 ml

**Description:**

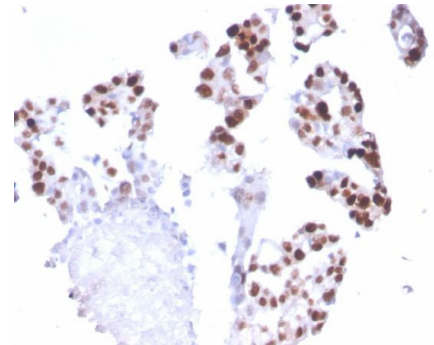
Species:	Mouse
Immunogen:	Ten repeats of synthetic peptide YSPTSPS using chemically synthesized phospho-Ser5
Clone:	CTD4H8
Isotype:	IgG1 / Kappa
Entrez Gene ID:	5430
Hu Chromosome Loc.:	17p13.1
Synonyms:	DNA-directed RNA polymerase II subunit RPB1, DNA-directed RNA polymerase II subunit A, DNA-directed RNA polymerase III largest subunit, RNA-directed RNA polymerase II subunit RPB1, 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; RplLS; RPO2; RPOL2
Mol. Weight of Antigen:	192-253kDa
Format:	200ug/ml of antibody purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Specificity:	Recognizes RNA polymerase II (pol II), an enzyme that is composed of 12 subunits and is responsible for the transcription of protein-encoded genes.
Background:	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.
Species Reactivity:	Human, Mouse, Rat
Positive Control:	HAP1, HePG2, K562, NIH3T3 cells. Human testis., PC3
Cellular Localization:	Chromosome, Cytoplasm, Nucleus
Titer/ Working Dilution:	Immunohistochemistry (Frozen and Formalin-fixed): 1-2 µg/ml Flow Cytometry: 1-2 µg/million cells Immunofluorescence: 1-3 µg/ml Western Blotting: 2-4 µg/ml
Microbiological State:	This product is not sterile.

Storage: 2° C  8° C



ScyTek Laboratories, Inc.  
 205 South 600 West  
 Logan, UT 84321  
 U.S.A.

**Uses/Limitations:** Not to be taken internally.  
For Research Use Only.  
This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.  
Do not use if reagent becomes cloudy.  
Do not use past expiration date.  
Non-Sterile.



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

**Ordering Information and Current Pricing at [www.scytek.com](http://www.scytek.com)**

**Procedure:**

1. **Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with Tris-EDTA HIER Solution (10x) pH 9.0 (ScyTek catalog# TES500) or Citrate Plus (10x) HIER Solution (ScyTek catalog# CPL500).
2. **Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.
3. **Visualization:** For maximum staining intensity we recommend the “UltraTek HRP Anti-Polyvalent Lab Pack” (ScyTek catalog# UHP125, see IFU for instructions) combined with the “DAB Chromogen/Substrate Bulk Pack (High Contrast)” (ScyTek catalog# ACV500, see IFU for instructions).


**Precautions:** Contains Sodium Azide as a preservative (0.09% w/v).  
Do not pipette by mouth.  
Avoid contact of reagents and specimens with skin and mucous membranes.  
Avoid microbial contamination of reagents or increased nonspecific staining may occur.  
This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.


**References:**

1. Madak-Erdogan, Z., et al. 2008. Mol. Endocrinol. 22: 2116-2127

**Warranty:**

No products or “Instructions For Use (IFU)” are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. ScyTek Laboratories, Inc. is not liable for any property damage, personal injury, time or effort or economic loss caused by our products. Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used.

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