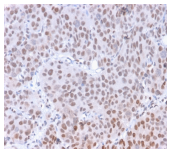
RNA Polymerase II CTD Repeat YSPTSPS Monoclonal Mouse Antibody (CTD 8A7)



Product 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.

This antibody is available purified, with BSA and azide (0.2 mg/mL) or purified, BSA- and azide-free (1 mg/mL). **Catalog number key for antibody number 3099, Anti-RNA Polymerase II CTD Repeat YSPTSPS (CTD 8A7)**

Product attributes

Antibody number	#3099
Antibody reactivity (target)	RNA Polymerase II CTD Repeat YSPTSPS
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	CTD 8A7
Isotype	IgM, kappa
Molecular weight	192-253 kDa
Synonyms	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; RpIILS; RPO2; RPOL2
Human gene symbol	POLR2A
Entrez gene ID	5430
SwissProt	P24928
Unigene	270017
Immunogen	Ten repeats of synthetic peptide YSPTSPS using chemically synthesized phospho-Ser5
Verified antibody applications	IHC (FFPE) (verified), WB (verified)
Antibody target cellular localization	Nucleus
Species reactivity	Human, S. cerevisia
Positive control	HAP1, K562, PC3, HePG2, NIH3T3 cells. Human testis.
Shipping condition	Room temperature
Storage Conditions	Note: store BSA-free antibodies at -10 to -35°C, Store at 2 to 8 °C, Protect fluorescent conjugates from light
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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