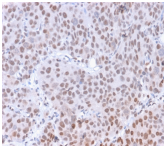


RNA Polymerase II CTD Repeat YSPTSPS Monoclonal Mouse Antibody (CTD 8A7)



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).

| 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; DNA-directed 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 |
| 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 |