

## Rat anti-Human RNA pol II CTD phospho Ser2 Monoclonal Antibody | anti-Ser2 antibody

RNA pol II CTD phospho Ser2 antibody (mAb)(Clone 3E7C7)

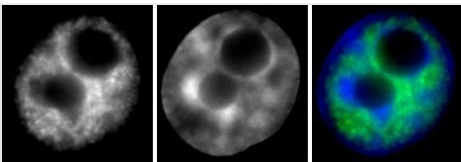
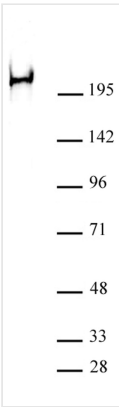
| CATALOG # | HOST | REACTIVITY | APPLICATIONS                                          |
|-----------|------|------------|-------------------------------------------------------|
| AAA60077  | Rat  | Human      | Western Blot, Immunofluorescence, Immunocytochemistry |

### PRODUCT SYNONYMS

RNA pol II CTD phospho Ser2; Monoclonal Antibody; RNA pol II CTD phospho Ser2 antibody (mAb)(Clone 3E7C7); RPB1; RPO2; POLR2; POLRA; RPBh1; RPOL2; RplILS; hSRPB1; hRPB220; anti-Ser2 antibody

### PRODUCT SPECIFICATIONS

|                                                |                                                                                                                                                                                                                                                                                           |
|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                           | Rat                                                                                                                                                                                                                                                                                       |
| Reactivity                                     | Human                                                                                                                                                                                                                                                                                     |
| Clonality                                      | Monoclonal                                                                                                                                                                                                                                                                                |
| Isotype                                        | IgG2a                                                                                                                                                                                                                                                                                     |
| Clone Number                                   | 3E7C7                                                                                                                                                                                                                                                                                     |
| Purity/Purification                            | Protein G Chromatography                                                                                                                                                                                                                                                                  |
| Form/Format                                    | Purified IgG in PBS with 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.                                                                                                                                                                                              |
| Concentration                                  | 1ug/ul (varies by lot)                                                                                                                                                                                                                                                                    |
| Applicable Applications for anti-Ser2 antibody | WB (Western Blot), IF (Immunofluorescence), ICC (Immunocytochemistry)                                                                                                                                                                                                                     |
| Conjugation                                    | Phosphorylated                                                                                                                                                                                                                                                                            |
| Immunogen                                      | This antibody was raised against a peptide containing the RNA pol II CTD sequence phosphorylated at serine 2.                                                                                                                                                                             |
| Abs Residue                                    | Ser                                                                                                                                                                                                                                                                                       |
| Preparation and Storage                        | Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20 degree C for up to 2 years. Keep all reagents on ice when not in storage.1ug/ul |



**IF (Immunofluorescence)**  
RNA pol II phospho Ser2 antibody (mAb) (Clone 3E7C7) tested by Immunofluorescence. Left: HeLa cell stained with RNA pol II CTD phospho Ser2 antibody (mAb). Middle: DAPI. Right: Merge.

**WB (Western Blot)**  
RNA pol II phospho Ser2 antibody (mAb) (Clone 3E7C7) tested by Western blot. HeLa nuclear extract (30 ug per lane) probed with RNA pol II phospho Ser2 antibody (mAb) at a 1 ug/ml dilution.

ADDITIONAL INFORMATION

|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-Ser2 antibody | <p>Short Description: Our RNA pol II CTD phospho Ser2 antibody (mAb)(Clone 3E7C7) was raised in a Rat host. It has been validated for use in Immunocytochemistry, Immunofluorescence and Western blot; it has been shown to react with Human samples.</p> <p>Background: RNA pol II (RNA polymerase II) is responsible for synthesizing messenger RNA in eukaryotes. RNA pol II contains a carboxy terminal domain composed of heptapeptide repeats that are essential for polymerase activity. These repeats contain serine and threonine residues that are phosphorylated in actively transcribing RNA polymerase. In addition, RNA pol II, in combination with several other polymerase subunits, form the DNA binding domain of the polymerase, a groove in which the DNA template is transcribed into RNA. During the transcription cycle, the CTD of the large subunit of RNA pol II is reversibly phosphorylated. RNA pol II containing unphosphorylated CTD is recruited to the promoter, whereas the hyperphosphorylated CTD form is involved in active transcription. Phosphorylation occurs at two sites within the heptapeptide repeat, at serine 2, serine 5 and serine 7. RNA pol II phosphorylated at serine 2 is enriched over the gene body and is associated with transcriptional elongation.</p> |
| Product Categories/Family for anti-Ser2 antibody   | Primary Antibodies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                 |
|----------------------------------|-----------------------------------------------------------------|
| NCBI GI #                        | 4505939                                                         |
| NCBI GeneID                      | 5430                                                            |
| NCBI Accession #                 | NP_000928; AB_2793740                                           |
| NCBI GenBank Nucleotide #        | NM_000937                                                       |
| UniProt Accession #              | P24928; Q6NX41; A6NN93; B9EH88                                  |
| Molecular Weight                 | 63,641 Da                                                       |
| NCBI Official Full Name          | DNA-directed RNA polymerase II subunit RPB1                     |
| NCBI Official Synonym Full Names | polymerase (RNA) II (DNA directed) polypeptide A, 220kDa        |
| NCBI Official Symbol             | POLR2A                                                          |
| NCBI Official Synonym Symbols    | RPB1; RPO2; POLR2; POLRA; RPBh1; RPOL2; RplILS; hsRPB1; hRPB220 |

|                            |                                                                                                                                                                                                                                                                 |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI Protein Information   | DNA-directed RNA polymerase II subunit RPB1; DNA-directed RNA polymerase II largest subunit, RNA polymerase II 220 kd subunit; DNA-directed RNA polymerase II subunit A; DNA-directed RNA polymerase III largest subunit; RNA polymerase II subunit B1; RNA-dir |
| UniProt Protein Name       | DNA-directed RNA polymerase II subunit RPB1                                                                                                                                                                                                                     |
| UniProt Gene Name          | <b>POLR2A</b>                                                                                                                                                                                                                                                   |
| UniProt Synonym Gene Names | POLR2; RNA polymerase II subunit B1                                                                                                                                                                                                                             |
| UniProt Entry Name         | RPB1_HUMAN                                                                                                                                                                                                                                                      |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/rna-pol-ii-ctd-phospho-ser2-antibody-clone-3e7c7-western-blot-immunofluorescence-immunocytochemistry-elisa/60077>