

Anti-RNA polymerase 2, CTD Ser7ph antibody

Clone	Cross reactivity	Application notes	Host	Isotype	Storage
3D4A12	Mammals	WB, ICC, ChIP	Rat	IgG2b, κ	-20°C

BACKGROUND : RNA polymerase II (RNAPII) transcribes all protein-coding genes and many non-coding genes, and the activity of RNAPII correlates with the phosphorylation state of RPB1, the large catalytic subunit of RNAPII. RPB1 has an unusual C-terminal domain (CTD) that consists of repeats of the heptapeptide consensus sequence N-Tyr1-Ser2-Pro3-Thr4-Ser5-Pro6-Ser7-C, of which there are 52 copies in mammals. The amino acids in these repeats are potential targets for modification, such as phosphorylation and glycosylation.

Immunogen Synthetic peptide corresponding to Ser7ph Peptide of RNA Pol II CTD repeat, SPTSPSYSPTSP(phS)YSPTSPS

Host Rat
Isotype IgG2b, κ
Cross reactivity Mammals

Specificity RNA polymerase 2, CTD Ser7ph

Application notes Recommended use
ELISA, WB, ICC, ChIP Not tested for other applications.
Recommended dilutions
Western blotting, 1/1000 to 1/5000
Immunocytochemistry, 1/100 to 1/500

Optional dilutions/concentrations should be determined by the end user.

Source Culture Supernatant

Purification Ion-exchange chromatography

Form Liquid

Presentation Purified monoclonal antibody in PBS, 50% Glycerol, 0.05%w/v ProClin300

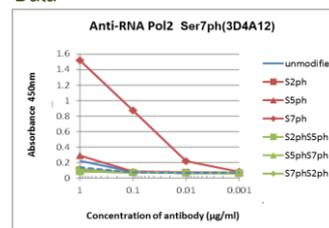
Concentration 1 mg/mL

Volume 100 μ L

Storage Store below -20°C
(below -70°C for prolonged storage)
Aliquot to avoid cycles of freeze/thaw.

References 1) Maehara et al., (2013) *Nucleic Acid Research*, 41,54-62
This antibody is used in ref.1.

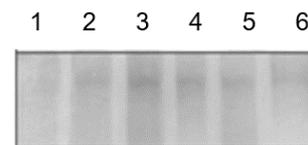
Data



unmodified SPTSPS YS PTS PS YSPTSPS
S2ph SPTSPS YS^{ph}PTS PS YSPTSPS
S5ph SPTSPS YS PTS^{ph}PS YSPTSPS
S7ph SPTSPS YS PTS PS^{ph}YSPTSPS
S2phS5ph SPTSPS YS^{ph}PTS^{ph}PS YSPTSPS
S5phS7ph SPTSPS YS PTS^{ph}PS^{ph}YSPTSPS
S7phS2ph SPTSPS^{ph}YS^{ph}PTS PS YSPTSPS

Fig.1 ELISA analysis

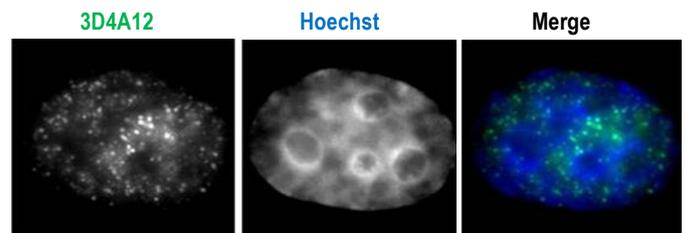
- RNA polymerase 2, CTD Ser7ph antibody (3D4A12)



1. HeLa WCE (human)
2. COS1 WCE (monkey)
3. L929 WCE (mouse)
4. NRK WCE (rat)
5. MDCK WCE (dog)
6. DM4 WCE (muntjac)

Fig.2 Western blot

- RNA polymerase 2, CTD Ser7ph antibody (3D4A12)
the mammalian cell total extracts



HeLa cells

Fig.3 Immunocytochemistry/Immunofluorescence

- RNA polymerase 2, CTD Ser7ph antibody (3D4A12)
HeLa cells