Monoclonal Antibody
Catalog No. CEC-016

For research use only.
Not for use in diagnostic procedures.

Anti-RNA polymerase 2, CTD Ser5ph antibody

Clone	Cross reactivity	Application notes	Host	Isotype	Storage
1H4B6	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 Ser5ph Peptide of RNA Pol II CTD repeat, SPTSPSYSPT(phS)PSYSPTSPS

Host Rat
Isotype IgG2b, κ
Cross reactivity Mammals

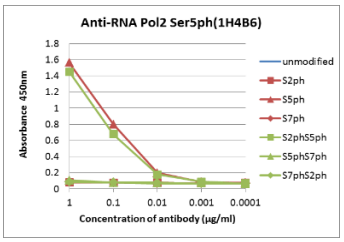
Specificity RNA polymerase 2, CTD Ser5ph
Application notes Recommended use
ELISA, WB, ICC, ChIP Not tested for other applications.
Recommended dilutions
Western blotting, 1/2500
Immunocytochemistry, 1/2500

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

References 1) Odawara et al., (2011) BMC Genomics. 12, 516
2) Maehara et al., (2013) Nucleic Acid Research, 41,54-62
This antibody is used in ref.1 and 2.

Data



unmodified	SPTSPS YS PTS PS YSPTSPS
S2ph	SPTSPS YSphPTS PS YSPTSPS
S5ph	SPTSPS YS PTSphPS YSPTSPS
S7ph	SPTSPS YS PTS PSphYSPTSPS
S2phS5ph	SPTSPS YSphPTSphPS YSPTSPS
S5phS7ph	SPTSPS YS PTSphPSphYSPTSPS
S7phS2ph	SPTSPSphYSphPTS PS YSPTSPS

Fig.1 ELISA analysis
- RNA polymerase 2, CTD Ser5ph antibody (1H4B6)

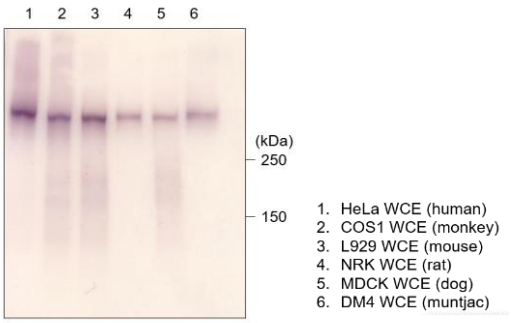


Fig.2 Western blot
- RNA polymerase 2, CTD Ser5ph antibody (1H4B6)
the mammalian cell total extracts

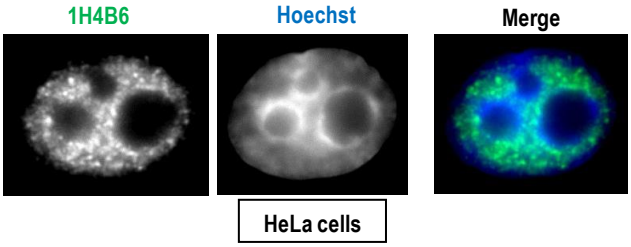


Fig.3 Immunocytochemistry/Immunofluorescence
- RNA polymerase 2, CTD Ser5ph antibody (1H4B6)
HeLa cells

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