



Anti- RNA polymerase 2, CTD Ser2ph [Clone : 3E7C7]

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.

Product type	Primary antibody
Immunogen	Synthetic peptide corresponding to Ser2ph of RNA Pol II CTD repeat, SPTSPSY(phS)PTSPSYSPTSPS
Raised in	Rat
Myeloma	SP2
Clone number	3E7C7
Isotype	IgG2a, κ
Host	-
Source	Culture supernatant
Purification	Ion-exchange chromatography
Form	Liquid
Storage buffer	PBS containing 50% Glycerol, 0.05% NaN ₃ as a preservative
Concentration	1 mg / ml
Volume	100 μ l
Label	Unlabeled
Specificity	RNA polymerase 2, CTD Ser2ph. Epitope: Phosphorylated Ser2 of CTD repeat
Cross reactivity	Human, Monkey, Mouse, Rat, Hamster Other species have not been tested.
Storage	Store below -20°C (below -70°C for prolonged storage) Aliquot to avoid cycles of freeze/thaw.
Other	Data Link : UniProtKB/Swiss-Prot P24928 * recommended positive controls is mammalian cell

Application notes	• Western blotting: 1/1000 - 1/5000
Recommended dilutions	• Immunocytochemistry: 1/100 – 1/500
	• ChIP

Other applications have not been tested.
Optimal dilutions/concentrations should be determined by the end user.

References	1) Odawara et al., BMC Genomics. 2011 Oct 20;12:516. PMID: 22011111 *
	* This antibody is used in ref.1.

ANTIBODY CHARACTERIZATION

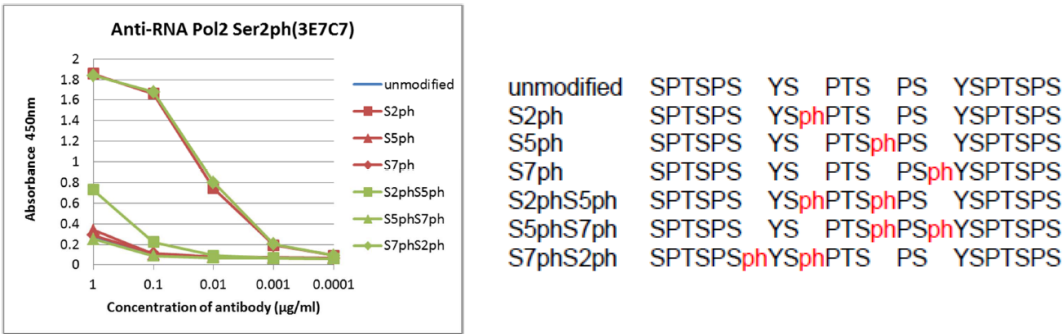


Fig.1 The composition of the CTD peptides and the reactivity of RNA polymerase 2,CTD Ser2ph antibody, 3E7C7.

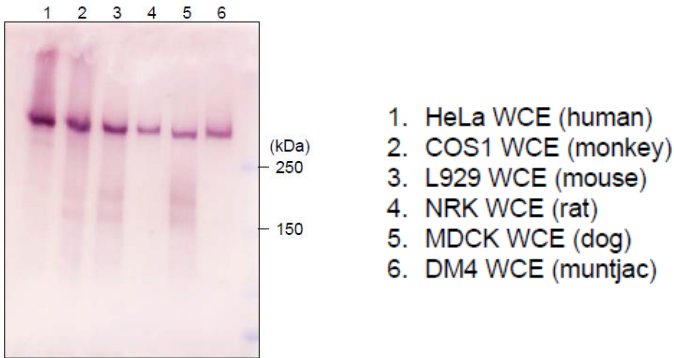


Fig.2. Western blot analysis of the mammalian cells extracts using RNA polymerase 2, CTD Ser2ph antibody, 3E7C7.

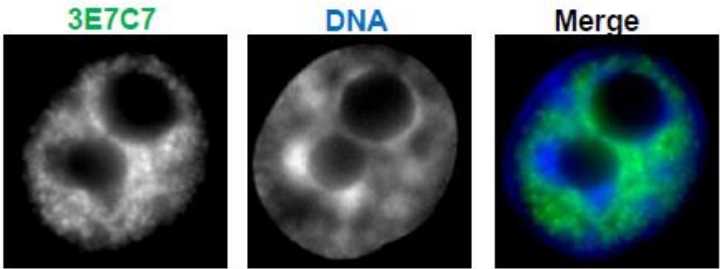


Fig.3 Immunocytochemical analysis of HeLa Cell using RNA polymerase 2, CTD Ser2ph antibody, 3E7C7.

RELATED PRODUCTS:

Product Name	Clone	Application	Maker	Cat#
Anti Histone H3.1/3.2 (Variant) Monoclonal Antibody	6G3C7	WB	CAC	CE-039A
Anti Histone H3.1/3.2 (Variant) Monoclonal Antibody	1D4F2	ChIP/ WB/ IC/ IHC/ IP	CAC	CE-039B
Anti Histone H3.3 (Variant) Monoclonal Antibody	6C4A3	WB	CAC	CE-040A
Anti Histone H3.3 (Variant) Monoclonal Antibody	4H2D7	ChIP/ WB/ IC/ IHC/ IP	CAC	CE-040B
Anti Histone H3 S10ph Monoclonal Antibody	6G8B7	WB/ IC	CAC	CE-034A
Anti Histone H3 T11ph Monoclonal Antibody	6G12C5	WB/ IC	CAC	CE-035A
Anti Histone H3 T32ph Monoclonal Antibody	6C7G12	WB/ IC	CAC	CE-036A
Anti Histone H3 K9Ac Monoclonal Antibody	2G1F9	WB/ IC	CAC	CE-037A
Anti RNA polymerase 2, CTD Ser2ph Monoclonal Antibody	3E7C7	ChIP/ WB/ IC	CAC	CE-030A
Anti RNA polymerase 2, CTD Ser5ph Monoclonal Antibody	1H4B6	ChIP/ WB/ IC	CAC	CE-031A

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