

## ChIP Validated RNA Pol II (S) Antibody with Positive and Negative Primer Sets



Catalogue no: 900003

Chromatrap®'s ChIP Validated RNA Pol II (S) Antibody with Positive and Negative Primer Sets provides a complete set of tools to assist with a successful ChIP assay. Including: RNA Pol II (S) antibody, control mouse IgG, positive and negative primer sets. The ChIP Validated RNA Pol II (S) Antibody with Positive and Negative Primer Sets is not suitable for use with non-human species.

### Background:

RNA polymerase II catalyses the transcription of DNA into mRNA and other small nuclear RNAs in eukaryotes. It contains a CTD consisting of conserved heptapeptide repeats. Phosphorylation occurs at serine and threonine residues located in the CTD repeats to activate the RNA pol II. RNA pol II binds to several transcription factors in order to initiate transcription and therefore serves as an abundant antibody target for ChIP.

A mouse IgG is included in this Antibody Primer Set as a negative control for the ChIP experiment.

The positive primer set included in this Antibody Primer Set recognises a gene associated with active transcription due to the role of RNA Pol II (S) in catalysing transcription. The negative gene target included recognises a gene that is associated with repressive transcription.

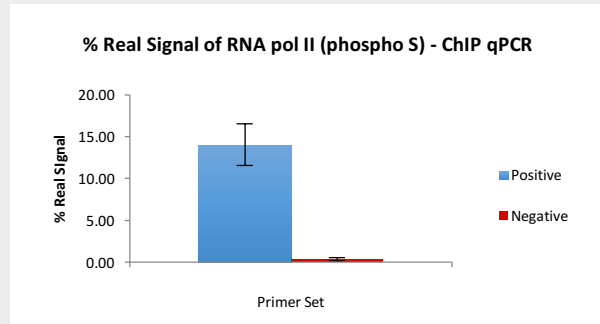
### Suggested Usage:

Component	Suggested Dilution	Figure
RNA Pol II (S)	2:1 (antibody: chromatin)	1
Mouse IgG	2:1 (antibody: chromatin)	1
Positive Primer Set	Dilute from 4µM (provided) to 1µM working concentration	
Negative Primer Set	Dilute from 4µM (provided) to 1µM working concentration	

Please note: Optimal dilutions should be determined by the user. These volumes are stated as guidelines only.

### Fig 1. RNA Pol II (S) ChIP qPCR

Chromatin immunoprecipitation (ChIP) assays were performed using the Chromatrap® standard ChIP spin column sonication kit for qPCR (Cat no. 500071) with 1ug of chromatin from Hec50 cells and 2ug of Anti-RNA pol II (phospho S) antibody. qPCR was used to analyse the enrichment of RNA pol II onto the positive gene locus compared with enrichment at the negative gene locus.



**Applications:** ChIP

**Concentration:** 0.8mg/ml

**Size:** 50µl

**Specificity:** Human

**Source:** Mouse

**Type:** Monoclonal

**Purification:** Protein A (affinity purified)

**Storage Conditions:** RNA Pol II (S), mouse IgG, and primer sets should all be stored at -20°C (Avoid multiple freeze/thaw cycles as this may denature the antibody and degrade the primer sets)