SUPPLEMENTARY TABLES

Supplementary Table 1. Antibodies used in this study

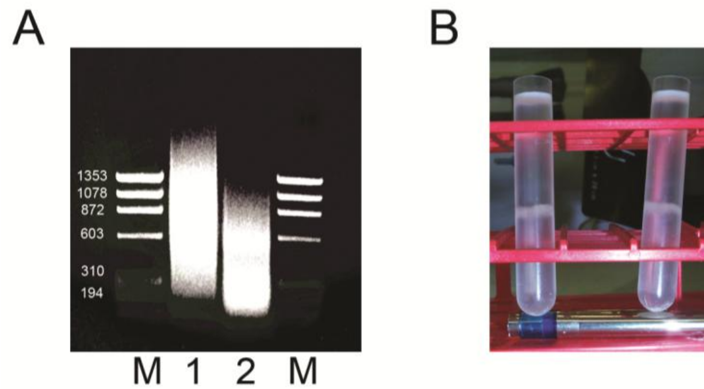
Target	Clone/Name	Species/type	Source/purification	Application[a]	Reference
Pol α catalytic subunit	p140	Rabbit polyclonal	Protein A	ChIP/WB	(24)
Pol δ catalytic subunit	K30	Rabbit polyclonal	Protein A	ChIP/WB	(20)
	K31, K32, K33	Rabbit polyclonal	Protein A	ChIP/WB	this study
	7B4	Rat Monoclonal	Hybridoma supernatant	WB	(20)
Pol ε catalytic subunit	G1A, H3B, E24C	Mouse monoclonal	Protein G	WB	(25)
	K19	Rabbit polyclonal	Protein A	ChIP	(20)
	K27	Rabbit polyclonal	Protein A	ChIP	(26)
PCNA	PC10	Mouse monoclonal	Sigma/Zymed	WB	
Mcm2	N19	Rabbit polyclonal	Santa Cruz Biotechnologies	WB	
Mcm3	N19	Rabbit polyclonal	Santa Cruz Biotechnologies	WB	
Lamin A/C	N18	Goat polyclonal	Santa Cruz Biotechnologies	ChIP/WB	
Cdc45	3G10	Rat monoclonal	Hybridoma supernatant	WB	(27)
Orc2	3B7	Mouse monoclonal	Stressgen	WB	
β-tubulin	KMX-1	Mouse monoclonal	Chemicon	WB	
Cyclin A	H-432	Rabbit polyclonal	Santa Cruz Biotechnologies	WB	

[a]Abbreviations: ChIP - chromatin immunoprecipitation, WB - Western blot

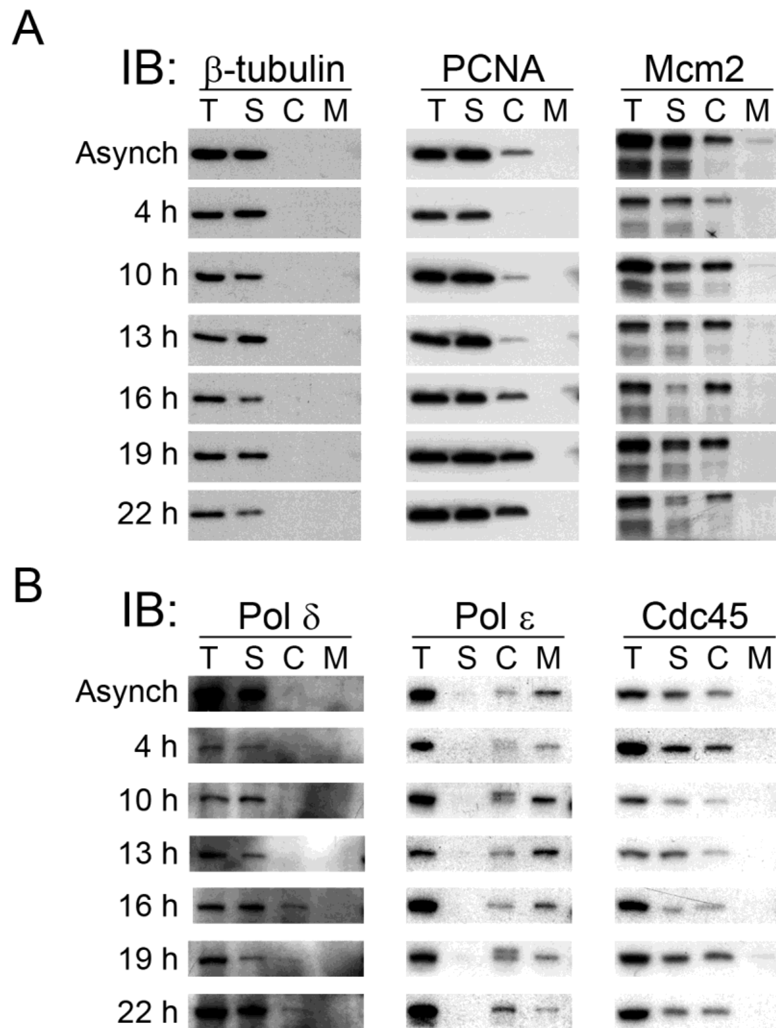
Supplementary Table 2. Primers used in this study

Primer	Sequence (5' to 3')	Amplicon length (bp)	Annealing temp (°C)	Reference
LB2C4F LB2C4R	ACACCGTGAGACGCGTTTGACC CAACAACCCATGAGCACCCTGG	138	63	This study
LB2C3F LB2C3R	CATTTCTTGGGCAAATGCCTAGG AGATGGGGTTTCTCCATGTTGG	160	63	This study
LB2C1F LB2C1R	GTTAACAGTCAGGCGCATGGGCC CCATCAGGGTCACCTCTGGTTCC	240	64	(30)
LB2F LB2R	GGCTGGCATGGACTTTCATTTCAG GTGGAGGGATCTTTCTTAGACATC	232	66	(30)
LB2C2F LB2C2R	TTCTGACCTCCAGCCCTGCAG ACCCAGTAGAAAGCTGCCCTC	107	63	This study
Ex9F Ex9R	TCTCAGAGGGTACCTGGTTTGG GGAATGTAGGGAGCTGCGGTG	90	60	This study
UPRF UPRR	GGTCAAGAGTTCCAAGTTTGTTCCT TGCAGGCGGGCATCAC	72	60	This study
In6F In6R	GACATTCTGCTTCCATAGATGTGG GTTGGGAAAGATGTCATCATCAGG	346	55	(30)
In7F In7R	GAGGAATGCCAGAATTTCCAGAGG TTCCATCTGGAATGAGATCCCAGC	327	58	(30)
b-satF b-satR	TGTCACAATGCCCCTGTAGG ACCCAGGTGATGTAACTCTTGT	68	59	This study

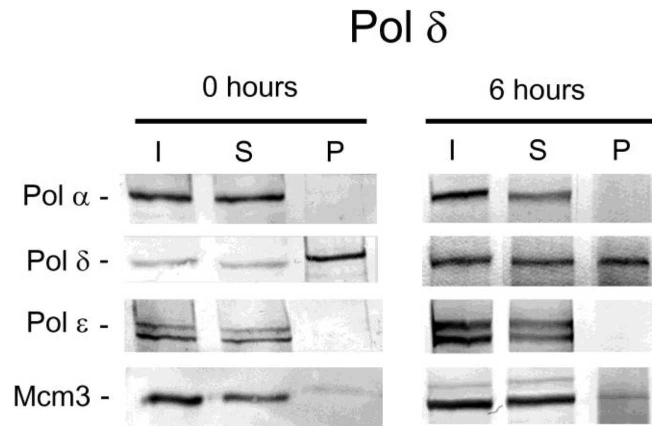
SUPPLEMENTARY FIGURES



Suppl. Figure 1. A. Analysis of nucleoprotein DNA by agarose gel electrophoresis. Crosslinked chromatin isolated from CsCl ultracentrifugation gradient was sonicated and then further digested with micrococcal nuclease. Size distribution of DNA was analyzed in 1% agarose/ethidiumbromide gel after the phenol/chloroform extraction and ethanol precipitation. M, molecular weight markers; Lane 1, sonicated nucleoprotein DNA; Lane 2, sonicated and micrococcal nuclease digested nucleoprotein DNA. **B.** Purification of nucleoprotein DNA. Cesium chloride density gradient centrifugation was performed to isolate crosslinked chromatin from free DNA and protein. Under high centrifugal force nucleoprotein placed in this gradient migrates to the isopycnic region (white zone in the middle of the tube)



Suppl. Figure 2. Chromatin and matrix association of replicative DNA polymerases during S phase. T98G cells synchronised by serum stimulation were subjected to subnuclear fractionation and relevant proteins were analysed by Western blotting. **A**. Analysis of marker proteins β-tubulin, PCNA and Mcm2 in fractionated T98G cells synchronised by serum stimulation. **B**. Analysis of Pols δ and ε as well as Cdc45 in fractionated T98G cells synchronised by serum stimulation. For each time point samples corresponding an equal number of fractionated cells were applied to SDS-PAGE and Western analysis to determine sub-cellular distribution of the respective protein at each time point. T, total cell extract; S, soluble fraction; B, chromatin bound fraction and M, matrix fraction.



Suppl. Figure 3. Association of Pol α, Pol ε and Mcm3 with S phase nucleoprotein complexes isolated by precipitation with antibodies against Pol δ. Mcm3, but essentially no Pol α or ε are co-precipitated. HeLa cells were synchronized by double thymidine block to G1/S (0 hours) and released to proceed into late S phase (6 hours). The antibody used for Western blotting is indicated on left site of the panels. Nucleoproteins were isolated and treated as described under "Experimental Procedures" for chromatin immunoprecipitation. Nucleoproteins derived from CsCl centrifugation were sonicated and digested with micrococcal nuclease as described in Experimental Procedures. Soluble nucleoproproteins, 1 mg/ 500 µl, were taken for immunoprecipitation with the cognate antibodies. 10 µl of soluble nucleoprotein complex (In), 10 µl of supernatant after precipitation (S) and entire precipitate (P) were loaded onto gel.