Supporting information for Dalrymple *et al.* (2001) *Proc. Natl. Acad. Sci. USA* **98** (20), 11627–11632. (10.1073/pnas.191384398)

Table 2. Protein families analysed in detail for β-binding motifs

Function	Family	Protein	Distribution	Location of PCNA/gp45 consensus binding motif	Bacterial orthologue/ close homologue
Polymerases	PolB	PolB	Archaea	Carboxyl terminus	PolB
	PolB	PolB	Chlorella + Felmannia sp virus	Carboxyl terminus	—
		gp43	Bacteriophage	Carboxyl terminus	—
			Eukaryotes	Internal	—
	PolC	—	—	—	DnaE PolC
	UmuC/DinB	pol	Eukaryotes	Does not bind?	DinB1 (PolIV) DinB2 UmuC (PolV)
Polymerase subunits	PolB	PolII	Archaea	Carboxyl-terminal large subunit	—
			Eukaryotes	Carboxyl-terminal pol32/p66/cdc27 subunit	—
	Flap endonuclease	FEN	Eukaryotes and archaea	Carboxyl terminus	Domain of PolI
	Ligase	DNA Ligase I	All	Amino-terminal eukaryotes	LigA
Repair components	MutS1 family	MSH2	Eukaryotes	May not bind	MutS1
		MSH3	Eukaryotes	Amino terminus	
		MSH6	Eukaryotes	Amino terminus	
	MutL family	MLH1	Eukaryotes	Not identified	MutL
	MutY family	MYH	Higher eukaryotes	Carboxyl terminus	MutY
	Methyl-cytosine methyl transferase	mcmt	Eukaryotes/archaea	Internal in vertebrates not identified in others	Various
	Uracil DNA glycosylase	UNG2 - nuclear isoform	Eukaryotes	Amino terminus	Ung
	5'-3' Endonucleases	XPG	Eukaryotes	Internal	Domain of PolI
		Various	Eukaryotes	Internal	Domain of PolI

Function	Family	Protein	Distribution	Location of PCNA/gp45 consensus binding motif	Bacterial orthologue/ close homologue
Clamp loading proteins	RFC1/RFC53/Rad 17	RFC1	Eukaryotes	Amino terminus, other not identified	—
		RFC53	Archaea	Carboxyl terminus	—
		Rad17	Eukaryotes	Not identified	
	RFC2-5	RFC2-5	Eukaryotes/archaea	Not identified	—
	gp62	gp62	Bacteriophage	Not identified	—
Others	Ribosomal protein homologue	GADD45/MyD118	Higher eukaryotes	Another site	—
	Transcriptional coactivator	gp33	Bacteriophage T4	Carboxyl terminus	—
	-family	gp55	Bacteriophage T4	Carboxyl terminus	—
	Cyclin	Cyclin D	Eukaryotes	Not identified	—
	Cyclin-dependent kinase	Cdk2	Eukaryotes	Not identified	
	Cyclin-dependent kinase inhibitors	p21/WAF1/ CIP1/Sdi1/Dacapo	Eukaryotes	Carboxyl terminus	—
		p57	Eukaryotes	Carboxyl terminus	
	Deacetylases	Histone deactetylases	Eukaryotes	Not identified	—
	Chromatin assembly	CAF1 - p150	Eukaryotes	Another site	—
	Polarity factor	Cdc24	*Schizosaccharomyces pombe*	Internal?	—
	Transposases	Pogo/Tigger	Eukaryotes	Carboxyl terminus	—
	HLA/MHC		Vertebrates?	Another site	—
	Virulence factor	ICP34.5	Herpes viruses	Another site	
	Myeloid differentiation /growth arrest and DNA damage	GADD43/Myd116	Higher eukaryotes	Another site	—
		hcdc18	Eukaryotes	Not identified	—