

Supplemental Material

Supplemental Table 1. DNA repair proteins in each of the human nucleolar proteome databases.

NOPDB ¹	T-cell nucleolar proteome ²	Human Protein Atlas ³
ACTL6A	APEX1	APEX2
APEX1	AQR	APTX
APTX	BAZ1B	CDC5L
AQR	BRCA2	CHAF1A
ASF1A	CDC5L	CSNK1D
ATM	CHD1L	DCLRE1A
ATR	DDB1	DTL
ATRIP	DDX1	FANCD2
ATRX	DEK	FANCG
BAZ1B	EXO1	FEN1
BCCIP	FANCI	HMGA1
BLM	FEN1	HMGA2
CDK1	HMGA1	HMGB2
CDK2	HMGB1	INO80C
CDK7	HMGB2	INO80E
CDK9	HUWE1	KDM2A
CHAF1A	KDM2A	KDM4A
COPS2	NONO	MAD2L2
COPS3	PARP1	MEIOB
COPS7B	PCNA	MUS81
COPS8	PRKDC	NPM1
CSNK1D	RAD21	NUDT16
CSNK1E	RAD50	PARP2
CUL4A	RBM14	PNKP
CUL4B	RFC1	POLR2F
DDB1	RFC2	POLR2K
DDX1	RFC4	PRMT6
DEK	RFC5	RAD51
ERCC2	RPA1	RNF111
ERCC3	SETX	RPAIN
FANCD2	SFPQ	SETMAR
FANCI	SMC1A	SFR1
FEN1	SMC3	SMARCA5
GTF2H1	SSRP1	SUMO1

GTF2H2	SUMO3	SUPT16H
GTF2H2C	TERF2	UBE2N
GTF2H4	TRRAP	UBE2T
H2AFX	UHRF1	USP28
HIST1H4A		WDR33
HIST3H2A		YY1
HIST3H3		
HLTF		
HMGA1		
HMGA2		
HMGB1		
HMGB2		
HSPA1A		
HUS1B		
HUWE1		
INTS3		
ISG15		
KDM1A		
KDM2A		
KIN		
KPNA2		
LIG1		
LIG3		
MC1R		
MDC1		
MLH1		
MMS19		
MNAT1		
MORF4L1		
MRE11A		
MSH2		
MSH6		
MUTYH		
NONO		
NPM1		
NSMCE1		
NSMCE4A		
OTUB1		
PARG		
PARP1		
PCNA		
PNKP		
POLR2E		

POLR2H		
POLR2K		
POLR2L		
PPIE		
PPP4C		
PRKDC		
PRPF19		
PSMD14		
PSME4		
RAD21		
RAD50		
RAD51AP1		
RBM14		
RBX1		
RECQL		
RFC1		
RFC2		
RFC3		
RFC4		
RFC5		
RIF1		
RPA3		
RPS27A		
RPS27L		
RPS3		
RUVBL1		
RUVBL2		
SFPQ		
SMARCA5		
SMC1A		
SMC3		
SMC5		
SMC6		
SSRP1		
SUMO1		
SUMO2		
SUMO3		
SUPT16H		
TCEA1		
TOPBP1		
TRIM28		
TRIP12		
TRRAP		

UBA52		
UBB		
UBC		
UBE2D3		
UBE2I		
UBE2N		
UBE2V2		
UBR5		
USP28		
USP7		
VCP		
WHSC1		
WRN		
XRCC1		
XRCC5		
XRCC6		

Supplemental Table 2. DNA repair proteins in the hit lists of each genetic screen aiming to identify proteins involved in ribosome biogenesis.

Badertscher et al. ⁴	Tafforeau et al. ⁵	Wild et al. ⁶	Neumuller et al. ⁷ (Fly)	Neumuller et al. ⁷ (Yeast)
AQR	APEX1	HUWE1	APLF	APEX1
BABAM1	BCCIP	POLR2A	AXIN2	APEX2
CDC5L	BLM	RPS27A	CDK9	CDC7
COPS2	CDC5L	RPS3	CETN2	CDK1
COPS3	CDK7		COPS4	CDK2
COPS4	CDK9		CRY2	CETN2
COPS5	CSNK1D		DMAP1	DDB1
COPS8	CSNK1E		ERCC2	DMAP1
DDB1	DDB1		ERCC4	ERCC2
NTHL1	DDX1		KDM4A	HIST1H4A
RBX1	DEK		KDM4B	HIST3H3
RPS27A	FEN1		KDM4D	KAT5
RPS3	MRE11A		KIAA0430	LIG1
SFPQ	NPM1		KPNA2	LIG3
TIMELESS	PCNA		LIG3	MNAT1
UBR5	POLR2E		MDC1	MSH2
USP43	POLR2H		MSH2	POLA1
VCP	PRKDC		MSH6	PRKCG
XAB2	PRPF19		NBN	PRPF19
	RFC3		OGG1	RFC3
	RFC4		PAPD7	SETX
	RPS3		PAXIP1	SMARCB1
	RUVBL1		PNKP	SSRP1
	RUVBL2		POLG	SUPT16H
	SETX		RECQL4	TAOK1
	SMC5		RFC2	TAOK3
	TOPBP1		RFC4	UBA7
	UBE2I		RNF111	USP1
			RUVBL2	VCP
			SSRP1	ZRANB3
			TONSL	
			TRRAP	
			UBE2I	
			UBE2U	
			WDR48	
			XRCC6	

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