

a	2CEDE (Yates)	Low er histone retention (MAT-)			Elevated histone retention (MAT+)			Low er and elevated HR (MAT-/+)		
		PARG A	PARG B	PARG C	PARG A	PARG B	PARG C	PARG A	PARG B	PARG C
	A 1-3	0.051	0.275	0.105	0.420	0.920	0.663	0.639	0.777	0.146
	B 1-3	0.063	0.047	0.088	0.603	0.024	0.888	0.229	0.920	0.159
	C 1-3	0.169	0.131	0.060	0.399	1.000	0.718	0.251	0.327	0.083
	All 2CE	0.026	0.005	0.009	0.212	0.431	0.823	0.663	0.128	0.016

b	2CEDE (Pearson)	Low er histone retention (MAT-)			Elevated histone retention (MAT+)			Low er and elevated HR (MAT-/+)		
		PARG A	PARG B	PARG C	PARG A	PARG B	PARG C	PARG A	PARG B	PARG C
	A 1-3	0.041	0.238	0.088	0.368	0.823	0.597	0.584	0.729	0.128
	B 1-3	0.055	0.041	0.078	0.560	0.021	0.823	0.888	0.210	0.146
	C 1-3	0.147	0.113	0.050	0.357	1.000	0.663	0.227	0.299	0.073
	All 2CE	0.023	0.004	0.008	0.195	0.406	0.791	0.639	0.119	0.014

c	HTS 2CE (Yates)	Low er histone retention (MAT-)			Elevated histone retention (MAT+)			Low er and elevated HR (MAT-/+)		
		PARG A	PARG B	PARG C	PARG A	PARG B	PARG C	PARG A	PARG B	PARG C
	A 1-3	0.017	0.584	0.740	0.823	0.603	0.517	0.046	0.219	0.357
	B 1-3	0.024	0.026	0.222	0.012	0.348	0.863	0.005	0.003	0.306
	C 1-3	0.752	0.560	0.708	0.752	0.185	0.590	1.000	0.920	0.920
	All 2CE	0.017	0.029	0.219	0.166	0.560	0.823	0.011	0.004	0.190

d	HTS 2CE (Pearson)	Low er histone retention (MAT-)			Elevated histone retention (MAT+)			Low er and elevated HR (MAT-/+)		
		PARG A	PARG B	PARG C	PARG A	PARG B	PARG C	PARG A	PARG B	PARG C
	A 1-3	0.012	0.484	0.624	0.689	0.493	0.417	0.034	0.176	0.297
	B 1-3	0.018	0.020	0.182	0.008	0.288	0.764	0.004	0.003	0.264
	C 1-3	0.647	0.467	0.597	0.632	0.137	0.488	1.000	1.000	1.000
	All 2CE	0.013	0.023	0.190	0.140	0.502	0.764	0.009	0.003	0.168

e	2CEDE (Yates)	Low er histone retention (MAT-)			Elevated histone retention (MAT+)			Low er and elevated HR (MAT-/+)		
		PJ34A	PJ34B	PJ34C	PJ34A	PJ34B	PJ34C	PJ34A	PJ34B	PJ34C
	A 1-4	0.015	0.1	0.025	0.133	0.729	1	0.009	0.242	0.04
	B 1-4	0.085	0.446	0.057	0.174	0.036	1	0.188	0.35	0.462
	C 1-2	1	0.286	0.617	0.764	1	0.718	0.92	0.454	0.92
	All 2CE	0.027	0.092	0.007	0.086	0.265	0.862	0.023	0.159	0.054

f	2CEDE (Pearson)	Low er histone retention (MAT-)			Elevated histone retention (MAT+)			Low er and elevated HR (MAT-/+)		
		PJ34A	PJ34B	PJ34C	PJ34A	PJ34B	PJ34C	PJ34A	PJ34B	PJ34C
	A 1-4	0.013	0.089	0.022	0.119	0.689	0.92	0.008	0.224	0.036
	B 1-4	0.074	0.41	0.049	0.154	0.029	1	0.17	0.322	0.431
	C 1-2	0.92	0.247	0.56	0.689	0.92	0.639	0.862	0.406	0.841
	All 2CE	0.024	0.083	0.009	0.079	0.244	0.841	0.021	0.149	0.05

Figure S9