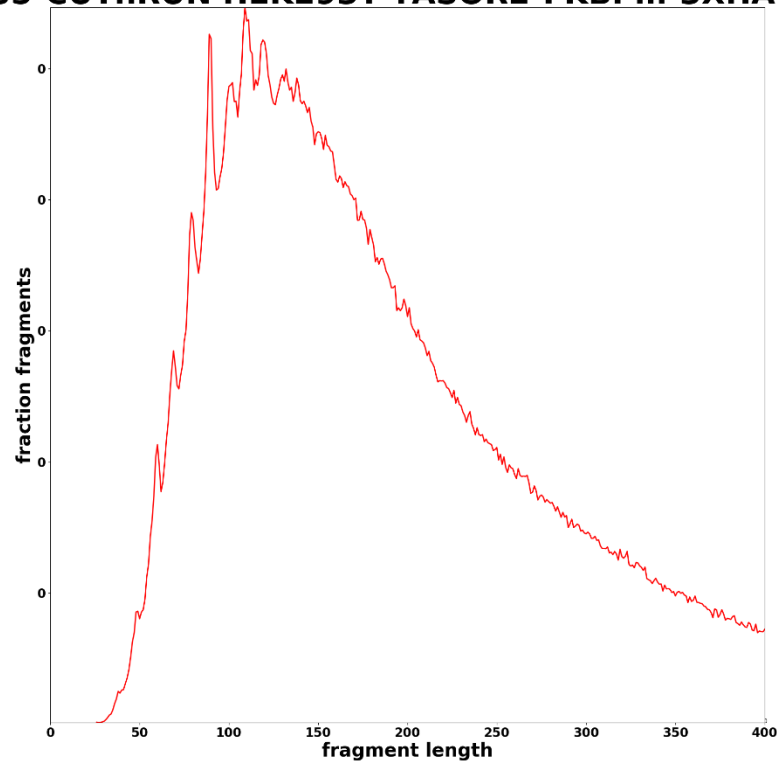
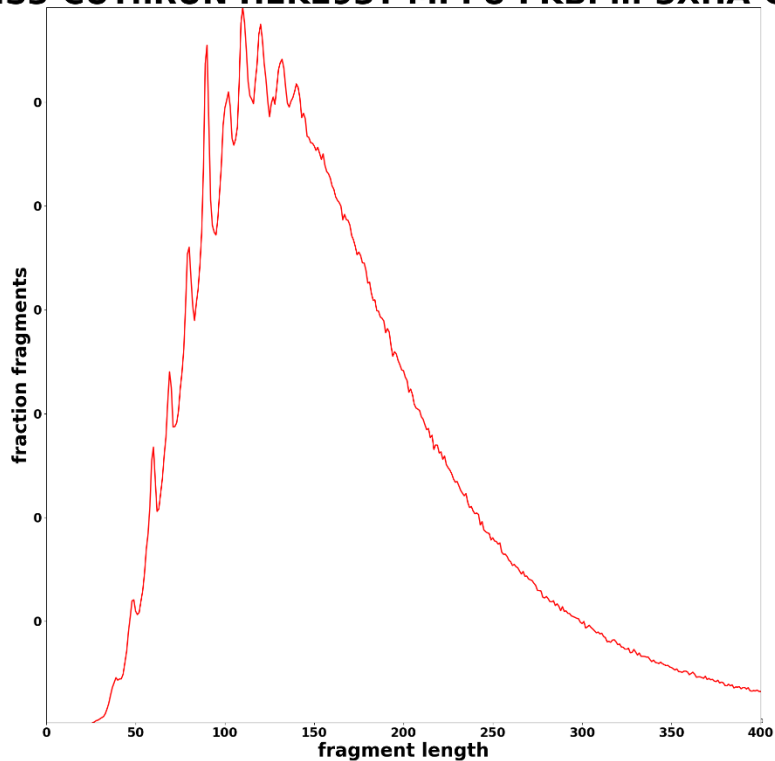


Mapping stats (first-pass alignment; 2x25mers)

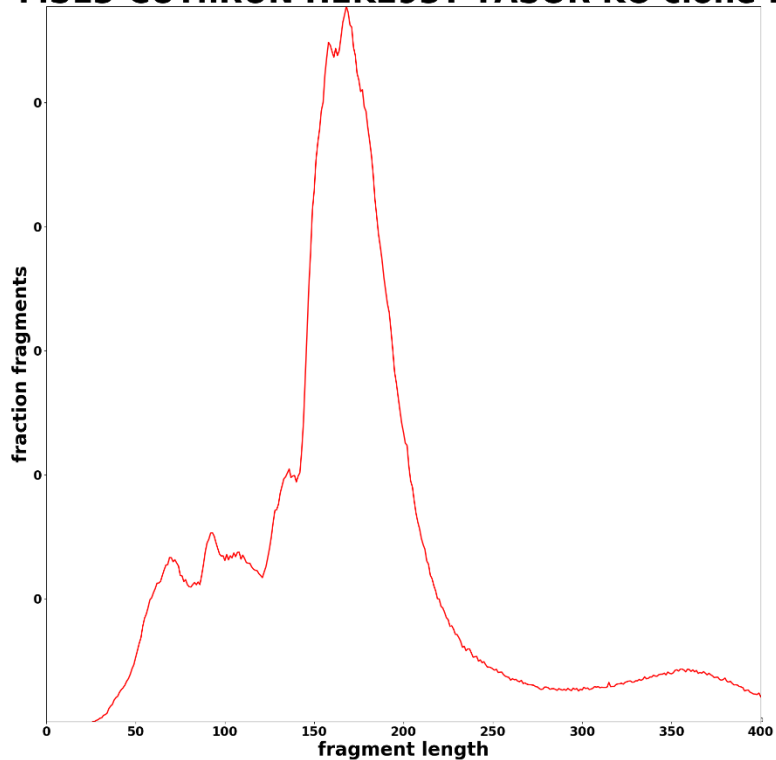
Species	#	Raw fragments	Read Length	Unique	Unique dedup	Multi	Complexity	Alignment fraction	MACS2 NumPeaks	MACS2 RPM	MACS2 noBL NumPeaks	MACS2 noBL RPM
hs1-T2T-CHM13v2.0	MS1-CUTnRUN-HA_HEK293T_WT	13,901,189	2x25	19,981,748			0.85	0.72				
hs1-T2T-CHM13v2.0	MS10-CUTnRUN-H3K4me3_HEK293T_WT	13,247,269	2x25	19,849,888			0.66	0.75				
hs1-T2T-CHM13v2.0	MS100-CUTnRUN-MPP8_TASOR2_KO_population_sgRNA2	11,452,147	2x25	17,193,102			0.89	0.75				
hs1-T2T-CHM13v2.0	MS101-CUTnRUN-MPP8_TASOR2_KO_population_sgRNA1+2+3	12,163,525	2x25	18,028,878			0.89	0.74				
hs1-T2T-CHM13v2.0	MS102-CUTnRUN-H3K9me3_WT_non-targeting_1_CRISPRi_transduced	8,598,209	2x25	11,365,214			0.87	0.66				
hs1-T2T-CHM13v2.0	MS103-CUTnRUN-H3K9me3_WT_non-targeting_2_CRISPRi_transduced	11,226,659	2x25	14,582,716			0.87	0.65				
hs1-T2T-CHM13v2.0	MS104-CUTnRUN-H3K9me3_TASOR2_CRISPRi_transduced_with_CRISPRi_1	11,596,600	2x25	14,936,532			0.88	0.64				
hs1-T2T-CHM13v2.0	MS105-CUTnRUN-H3K9me3_TASOR2_CRISPRi_transduced_with_CRISPRi_2	7,163,777	2x25	9,220,674			0.88	0.64				
hs1-T2T-CHM13v2.0	MS106-CUTnRUN-H3K9me3_TASOR2_CRISPRi_transduced_with_CRISPRi_3	8,633,879	2x25	11,081,046			0.87	0.64				
hs1-T2T-CHM13v2.0	MS107-CUTnRUN-H3K9me3_TASOR_CRISPRi_transduced_with_CRISPRi_1	11,288,013	2x25	14,402,864			0.88	0.64				
hs1-T2T-CHM13v2.0	MS108-CUTnRUN-H3K9me3_TASOR_CRISPRi_transduced_with_CRISPRi_2	12,132,593	2x25	15,508,808			0.88	0.64				
hs1-T2T-CHM13v2.0	MS109-CUTnRUN-H3K9me3_MPP8_CRISPRi_transduced_with_CRISPRi_1	14,038,489	2x25	18,295,432			0.87	0.65				
hs1-T2T-CHM13v2.0	MS11-CUTnRUN-H3K9me3_HEK293T_WT	4,617,836	2x25	6,198,036			0.84	0.67				
hs1-T2T-CHM13v2.0	MS110-CUTnRUN-H3K9me3_MPP8_CRISPRi_transduced_with_CRISPRi_2	12,645,322	2x25	16,335,064			0.87	0.65				
hs1-T2T-CHM13v2.0	MS111-CUTnRUN-H3K9me3_H3K9me3_with_abcam_monoclonal_ab176916	16,092,367	2x25	23,378,786			0.87	0.73				
hs1-T2T-CHM13v2.0	MS112-CUTnTag_H3K9me3_WT_non-targeting_1_CRISPRi_transduced	6,903,242	2x25	9,116,566			0.79	0.66				
hs1-T2T-CHM13v2.0	MS113-CUTnTag_H3K9me3_WT_non-targeting_2_CRISPRi_transduced	6,525,811	2x25	8,507,240			0.80	0.65				
hs1-T2T-CHM13v2.0	MS114-CUTnTag_H3K9me3_TASOR2_CRISPRi_transduced_with_CRISPRi_1	7,687,465	2x25	9,868,534			0.79	0.64				
hs1-T2T-CHM13v2.0	MS115-CUTnTag_H3K9me3_TASOR2_CRISPRi_transduced_with_CRISPRi_2	3,801,684	2x25	5,154,574			0.85	0.68				
hs1-T2T-CHM13v2.0	MS116-CUTnTag_H3K9me3_TASOR2_CRISPRi_transduced_with_CRISPRi_3	6,375,978	2x25	8,274,342			0.79	0.65				
hs1-T2T-CHM13v2.0	MS117-CUTnTag_H3K9me3_TASOR_CRISPRi_transduced_with_CRISPRi_1	6,814,584	2x25	9,049,220			0.82	0.66				
hs1-T2T-CHM13v2.0	MS12-CUTnRUN-H3K9me3_HEK293T_WT	5,498,825	2x25	7,467,580			0.82	0.68				
hs1-T2T-CHM13v2.0	MS13-CUTnRUN-H3K9me3_HEK293T_TASOR_KO_clone_1	5,486,937	2x25	7,503,608			0.84	0.68				
hs1-T2T-CHM13v2.0	MS14-CUTnRUN-H3K9me3_HEK293T_TASOR_KO_clone_2	4,175,176	2x25	5,666,260			0.84	0.68				
hs1-T2T-CHM13v2.0	MS15-CUTnRUN-H3K9me3_HEK293T_MPP8_KO_clone_1	5,336,171	2x25	7,062,010			0.84	0.66				
hs1-T2T-CHM13v2.0	MS16-CUTnRUN-H3K9me3_HEK293T_MPP8_KO_clone_2	4,245,517	2x25	5,864,600			0.83	0.69				
hs1-T2T-CHM13v2.0	MS17-CUTnRUN-H3K9me3_HEK293T_PPHLN1_KO_clone_1	4,546,539	2x25	6,134,678			0.83	0.67				
hs1-T2T-CHM13v2.0	MS18-CUTnRUN-H3K9me3_HEK293T_PPHLN1_KO_clone_2	4,741,937	2x25	6,443,210			0.84	0.68				
hs1-T2T-CHM13v2.0	MS19-CUTnRUN-H3K9me3_HEK293T_SETDB1_KO_clone_1	3,221,244	2x25	4,550,228			0.85	0.71				
hs1-T2T-CHM13v2.0	MS2-CUTnRUN-HA_HEK293_WT	10,944,643	2x25	16,102,620			0.85	0.74				
hs1-T2T-CHM13v2.0	MS20-CUTnRUN-H3K9me3_HEK293T_SETDB1_KO_clone_2	3,440,348	2x25	5,000,142			0.84	0.73				
hs1-T2T-CHM13v2.0	MS21-CUTnRUN-H3K9me3_HEK293T_HA-TASOR2	3,157,690	2x25	3,911,016			0.85	0.62				
hs1-T2T-CHM13v2.0	MS22-CUTnRUN-H3K9me3_HEK293T_HA-TASOR2	2,802,080	2x25	3,516,004			0.85	0.63				
hs1-T2T-CHM13v2.0	MS23-CUTnRUN-H3K9me3_HEK293T_HA-TASOR2_TASOR2_KO_population_1	2,959,696	2x25	3,684,888			0.85	0.62				
hs1-T2T-CHM13v2.0	MS24-CUTnRUN-H3K9me3_HEK293T_HA-TASOR2_TASOR2_KO_population_2	3,342,098	2x25	3,996,468			0.86	0.60				
hs1-T2T-CHM13v2.0	MS25-CUTnRUN-H3K9me3_HEK293T_HA-TASOR2_TASOR2_KO_population_3	3,243,308	2x25	4,199,682			0.86	0.65				
hs1-T2T-CHM13v2.0	MS26-CUTnRUN-H3K9me3_HEK293T_HA-TASOR2_TASOR2_KO_population_4	2,838,569	2x25	3,642,752			0.86	0.64				
hs1-T2T-CHM13v2.0	MS27-CUTnRUN-H3K9me3_HEK293T_TASOR_KO_clone_1_TASOR2_KO_populat	2,917,180	2x25	3,853,600			0.86	0.66				
hs1-T2T-CHM13v2.0	MS28-CUTnRUN-H3K9me3_HEK293T_TASOR_KO_clone_1_TASOR2_KO_populat	4,816,319	2x25	6,446,494			0.85	0.67				
hs1-T2T-CHM13v2.0	MS29-CUTnRUN-HA_HEK293T_WT	4,786,660	2x25	6,826,746			0.86	0.71				
hs1-T2T-CHM13v2.0	MS3-CUTnRUN-HA_HEK293T_MPP8-FKBPm-3XHA-GFP	8,044,382	2x25	11,371,474			0.85	0.71				
hs1-T2T-CHM13v2.0	MS30-CUTnRUN-HA_HEK293T_WT	5,703,401	2x25	8,378,490			0.86	0.73				
hs1-T2T-CHM13v2.0	MS31-CUTnRUN-HA_HEK293T_MPP8-FKBPm-3XHA-GFP	6,046,313	2x25	8,777,678			0.87	0.73				
hs1-T2T-CHM13v2.0	MS32-CUTnRUN-HA_HEK293T_MPP8-FKBPm-3XHA-GFP	4,662,005	2x25	6,809,230			0.87	0.73				
hs1-T2T-CHM13v2.0	MS35-CUTnRUN-GFP_HEK293T_WT	5,204,324	2x25	7,247,770			0.85	0.70				

Fragment lengths (some examples)

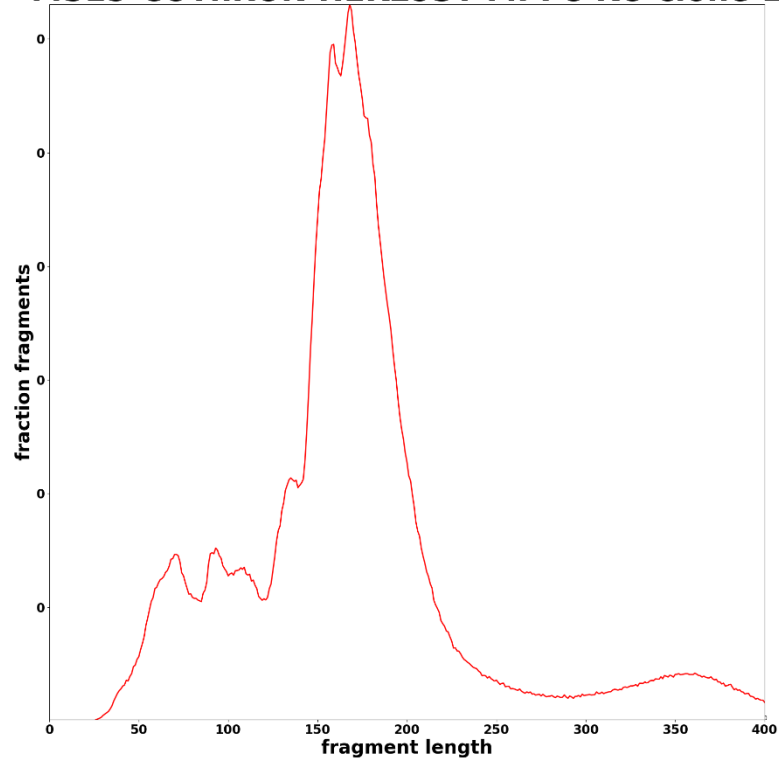
MS3-CUTnRUN HEK293T MPP8-FKBPm-3XHA-GFP **MS5-CUTnRUN HEK293T TASOR2-FKBPm-3XHA-GFP**



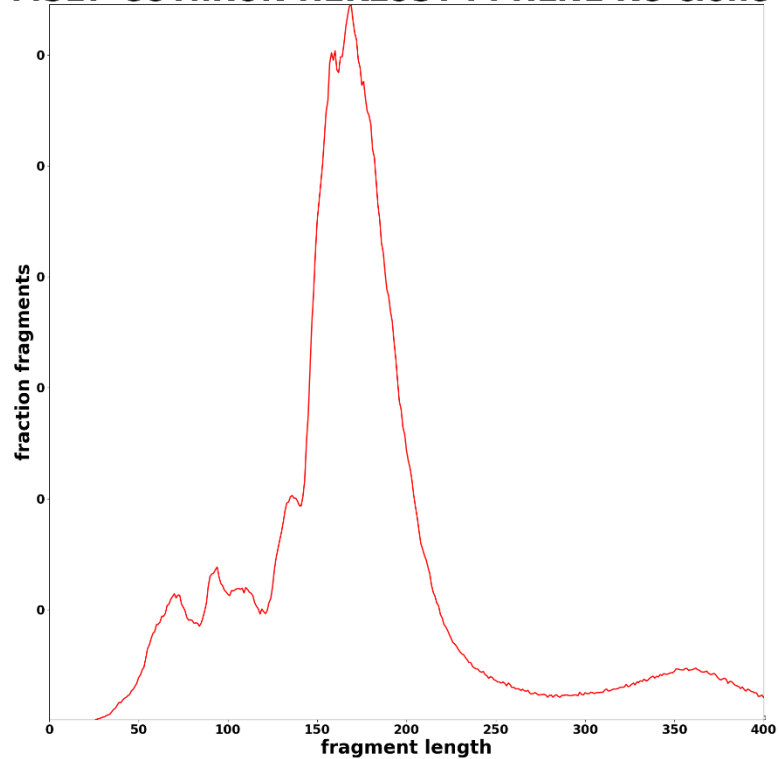
MS13-CUTnRUN HEK293T TASOR KO clone 1



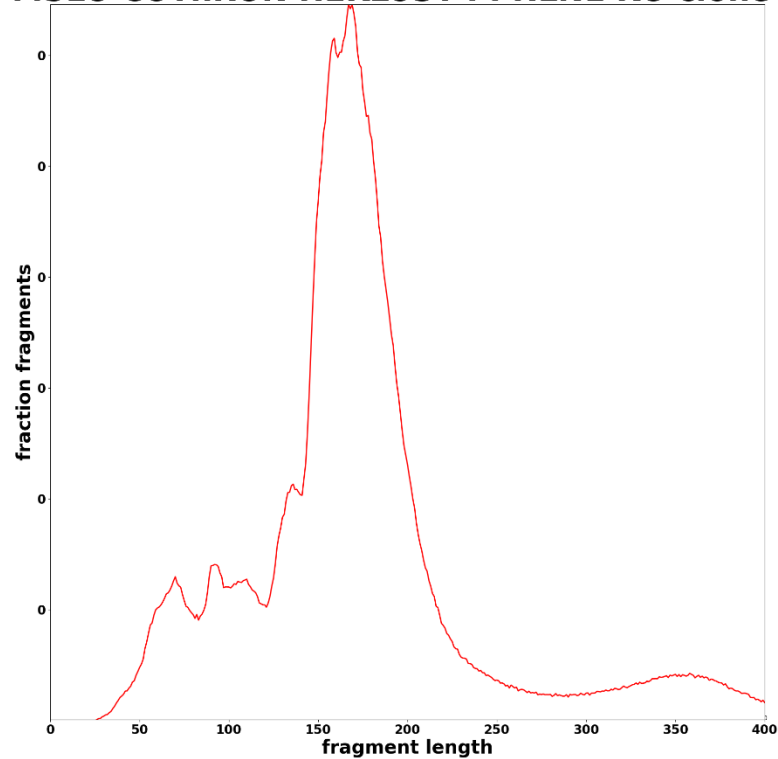
MS15-CUTnRUN HEK293T MPP8 KO clone 1



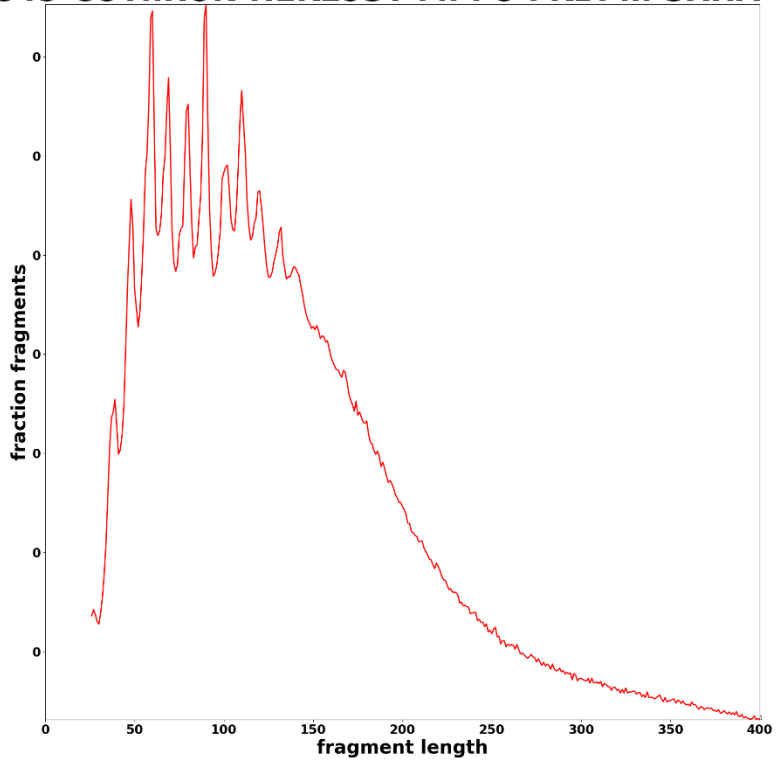
MS17-CUTnRUN HEK293T PPHLN1 KO clone 1



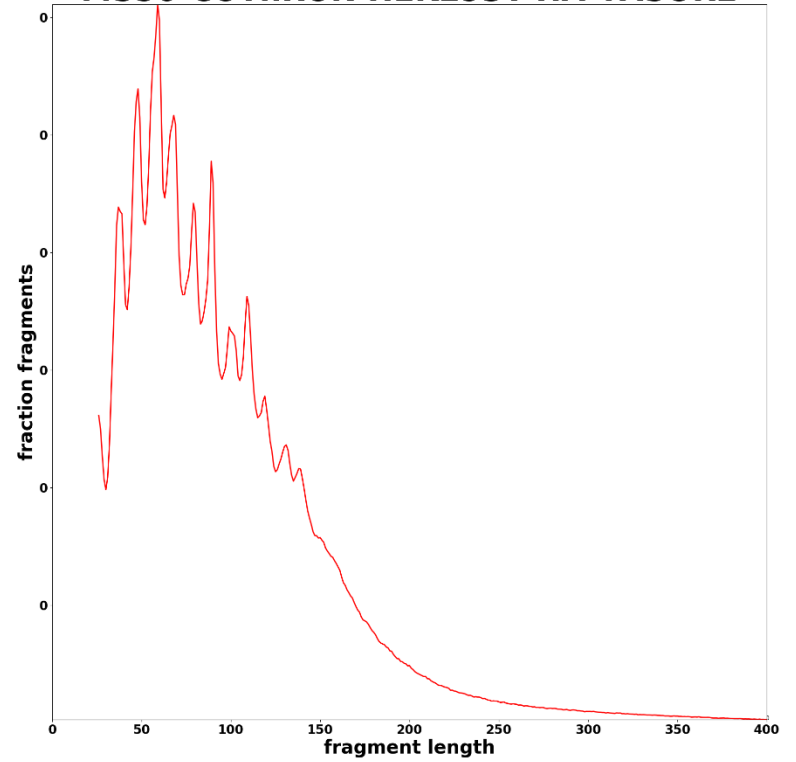
MS18-CUTnRUN HEK293T PPHLN1 KO clone 2



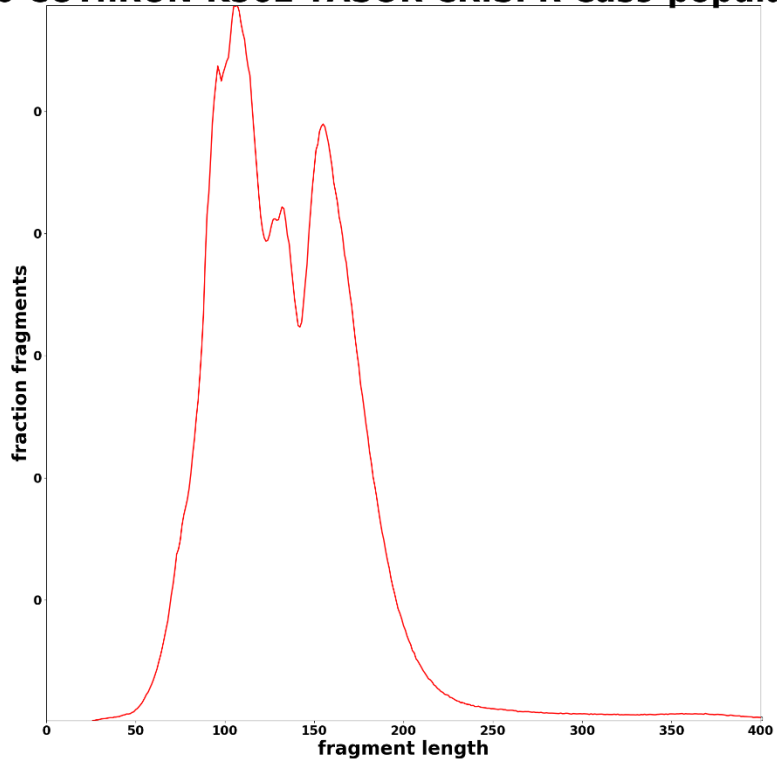
MS45-CUTnRUN HEK293T MPP8-FKBPm-3XHA-GFP



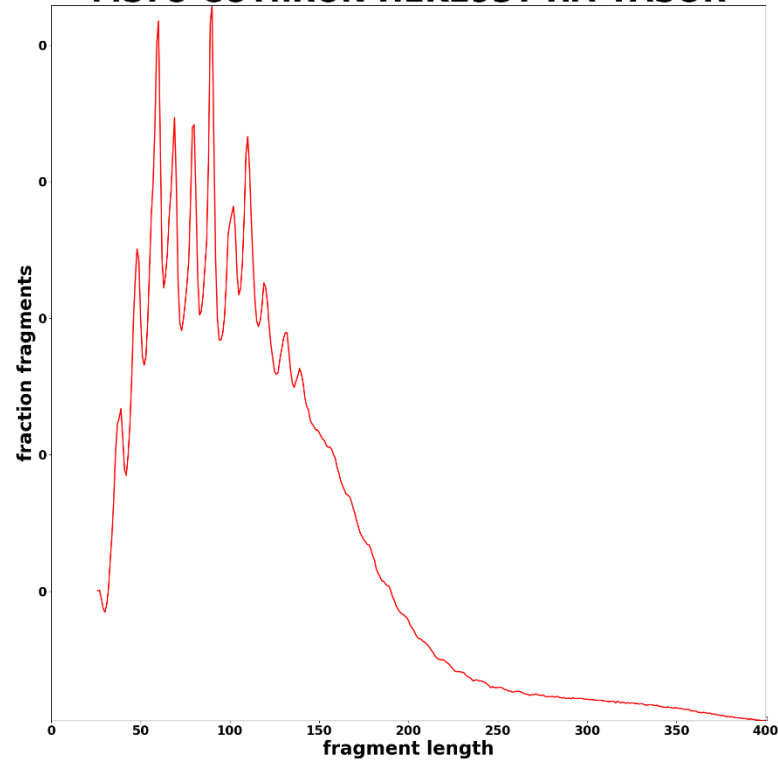
MS56-CUTnRUN HEK293T HA-TASOR2



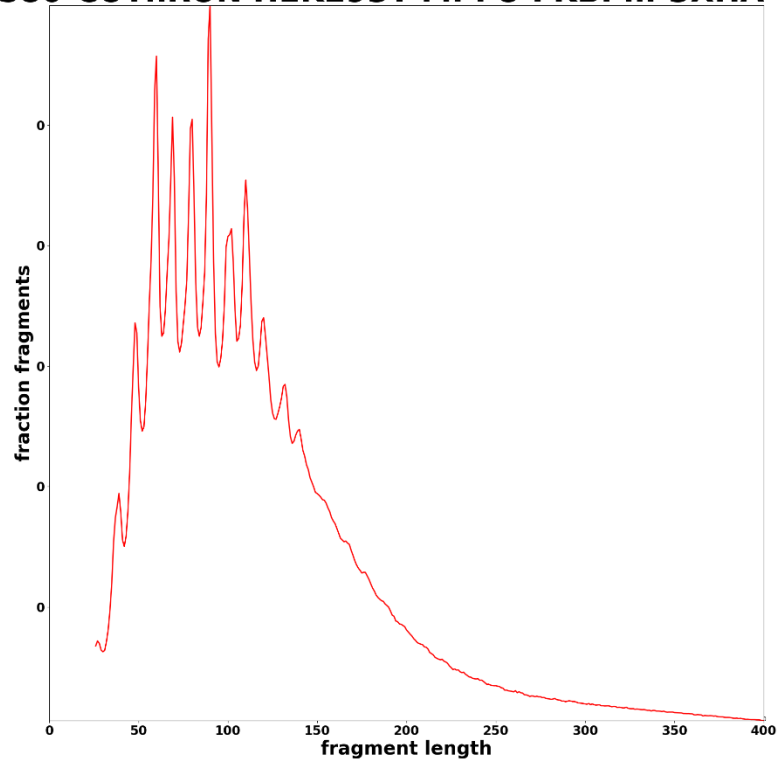
560 CUTnRUN-K562 TASOR CRISPR Cas9 population



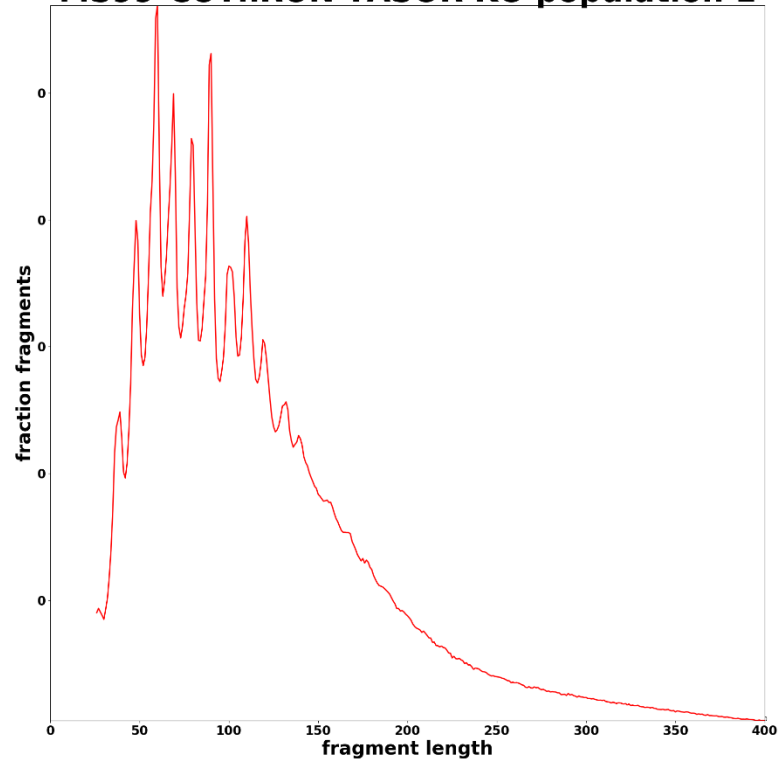
MS78-CUTnRUN HEK293T HA-TASOR



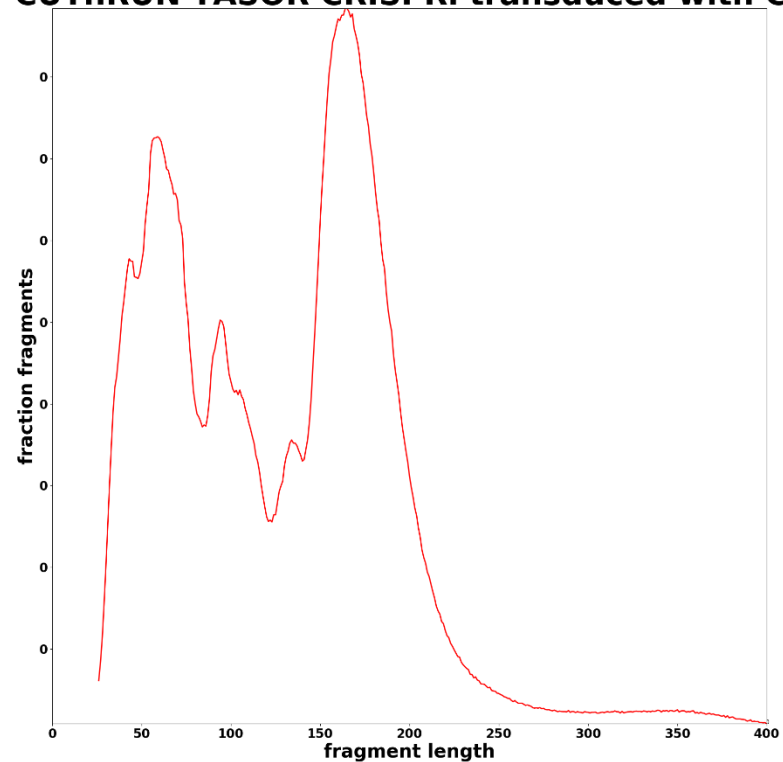
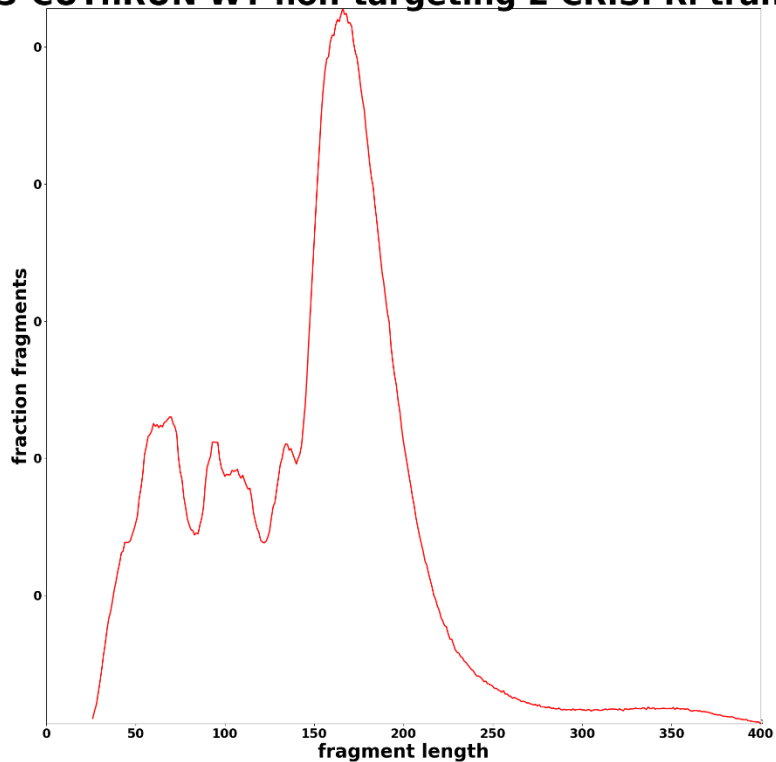
MS80-CUTnRUN HEK293T MPP8-FKBPm-3XHA-GFP



MS99-CUTnRUN TASOR KO population 1



103-CUTnRUN WT non-targeting 2 CRISPRi transdu **07-CUTnRUN TASOR CRISPRi transduced with CRISPRi**



There are still a lot of short fragments in a number of the libraries.

Alignment done subsequently as 2x36mers

Mapping stats (2x36mers)

Species	#	Raw fragments	Read Length	Unique	Unique dedup	Multi	Complexity	Alignment fraction	MACS2 NumPeaks	MACS2 RPM	MACS2 post-IDR NumPeaks	MACS2 post-IDR RPM
hs1-T2T-CHM13v2.0	MS1-CUTnRUN-HA_HEK293T_WT	13,901,189	2x36	21,458,736		3,499,482	0.85	0.77	74	3,182		
hs1-T2T-CHM13v2.0	MS10-CUTnRUN-H3K4me3_HEK293T_WT	13,247,269	2x36	20,456,816		1,803,954	0.66	0.84	14,271	546,739		
hs1-T2T-CHM13v2.0	MS100-CUTnRUN-MPP8_TASOR2_KO_population_sgRNA2	11,452,147	2x36	17,848,364		2,941,428	0.89	0.91	36	2,913		
hs1-T2T-CHM13v2.0	MS101-CUTnRUN-MPP8_TASOR2_KO_population_sgRNA1+2+3	12,163,525	2x36	18,648,746		3,265,766	0.89	0.90	40	2,556		
hs1-T2T-CHM13v2.0	MS102-CUTnRUN-H3K9me3_WT_non-targeting_1_CRISPRi_transduced	8,598,209	2x36	12,233,288		4,100,120	0.87	0.95	1,729	3,354		
hs1-T2T-CHM13v2.0	MS103-CUTnRUN-H3K9me3_WT_non-targeting_2_CRISPRi_transduced	11,226,659	2x36	15,766,714		5,573,232	0.86	0.95	4,957	8,247		
hs1-T2T-CHM13v2.0	MS104-CUTnRUN-H3K9me3_TASOR2_CRISPRi_transduced_with_CRISPRi_1	11,596,600	2x36	16,072,576		5,782,082	0.88	0.94	6,599	10,397		
hs1-T2T-CHM13v2.0	MS105-CUTnRUN-H3K9me3_TASOR2_CRISPRi_transduced_with_CRISPRi_2	7,163,777	2x36	9,979,482		3,593,894	0.88	0.95	1,412	2,728		
hs1-T2T-CHM13v2.0	MS106-CUTnRUN-H3K9me3_TASOR2_CRISPRi_transduced_with_CRISPRi_3	8,633,879	2x36	12,051,596		4,363,010	0.87	0.95	1,318	2,658		
hs1-T2T-CHM13v2.0	MS107-CUTnRUN-H3K9me3_TASOR_CRISPRi_transduced_with_CRISPRi_1	11,288,013	2x36	15,315,302		5,704,852	0.88	0.93	4,909	7,875		
hs1-T2T-CHM13v2.0	MS108-CUTnRUN-H3K9me3_TASOR_CRISPRi_transduced_with_CRISPRi_2	12,132,593	2x36	16,693,324		6,247,454	0.88	0.95	5,671	9,013		
hs1-T2T-CHM13v2.0	MS109-CUTnRUN-H3K9me3_MPP8_CRISPRi_transduced_with_CRISPRi_1	14,038,489	2x36	19,610,962		6,906,932	0.87	0.94	6,305	8,733		
hs1-T2T-CHM13v2.0	MS11-CUTnRUN-H3K9me3_HEK293T_WT	4,617,836	2x36	6,783,524		1,850,712	0.83	0.93	5,208	1,832		
hs1-T2T-CHM13v2.0	MS110-CUTnRUN-H3K9me3_MPP8_CRISPRi_transduced_with_CRISPRi_2	12,645,322	2x36	17,565,590		6,284,980	0.86	0.94	4,110	6,298		
hs1-T2T-CHM13v2.0	MS111-CUTnRUN-H3K9me3_H3K9me3_with_abcam_monoclonal_ab176916	16,092,367	2x36	24,841,028		5,677,288	0.87	0.95	2,982	2,628		
hs1-T2T-CHM13v2.0	MS112-CUTnTag_H3K9me3_WT_non-targeting_1_CRISPRi_transduced	6,903,242	2x36	10,404,022		2,728,666	0.79	0.95	36,627	175,204		
hs1-T2T-CHM13v2.0	MS113-CUTnTag_H3K9me3_WT_non-targeting_2_CRISPRi_transduced	6,525,811	2x36	9,732,622		2,650,676	0.79	0.95	38,222	200,364		
hs1-T2T-CHM13v2.0	MS114-CUTnTag_H3K9me3_TASOR2_CRISPRi_transduced_with_CRISPRi_1	7,687,465	2x36	11,328,752		3,280,374	0.79	0.95	45,658	230,782		
hs1-T2T-CHM13v2.0	MS115-CUTnTag_H3K9me3_TASOR2_CRISPRi_transduced_with_CRISPRi_2	3,801,684	2x36	5,806,534		1,394,930	0.85	0.95	11,271	61,027		
hs1-T2T-CHM13v2.0	MS116-CUTnTag_H3K9me3_TASOR2_CRISPRi_transduced_with_CRISPRi_3	6,375,978	2x36	9,475,498		2,635,064	0.78	0.95	35,715	194,021		
hs1-T2T-CHM13v2.0	MS117-CUTnTag_H3K9me3_TASOR_CRISPRi_transduced_with_CRISPRi_1	6,814,584	2x36	10,266,744		2,722,988	0.82	0.95	24,840	105,071		
hs1-T2T-CHM13v2.0	MS12-CUTnRUN-H3K9me3_HEK293T_WT	5,498,825	2x36	8,168,760		2,104,116	0.82	0.93	857	2,660		
hs1-T2T-CHM13v2.0	MS13-CUTnRUN-H3K9me3_HEK293T_TASOR_KO_clone_1	5,486,937	2x36	8,197,048		2,097,402	0.84	0.94	935	2,656		
hs1-T2T-CHM13v2.0	MS14-CUTnRUN-H3K9me3_HEK293T_TASOR_KO_clone_2	4,175,176	2x36	6,196,908		1,623,288	0.84	0.94	550	1,924		
hs1-T2T-CHM13v2.0	MS15-CUTnRUN-H3K9me3_HEK293T_MPP8_KO_clone_1	5,336,171	2x36	7,743,926		2,282,450	0.83	0.94	2,027	6,789		
hs1-T2T-CHM13v2.0	MS16-CUTnRUN-H3K9me3_HEK293T_MPP8_KO_clone_2	4,245,517	2x36	6,385,776		1,541,140	0.83	0.93	171	684		
hs1-T2T-CHM13v2.0	MS17-CUTnRUN-H3K9me3_HEK293T_PPHLN1_KO_clone_1	4,546,539	2x36	6,727,786		1,827,050	0.83	0.94	1,011	3,599		
hs1-T2T-CHM13v2.0	MS18-CUTnRUN-H3K9me3_HEK293T_PPHLN1_KO_clone_2	4,741,937	2x36	7,046,712		1,842,536	0.83	0.94	1,083	3,763		
hs1-T2T-CHM13v2.0	MS19-CUTnRUN-H3K9me3_HEK293T_SETDB1_KO_clone_1	3,221,244	2x36	4,859,520		1,192,992	0.85	0.94	267	923		
hs1-T2T-CHM13v2.0	MS2-CUTnRUN-HA_HEK293_WT	10,944,643	2x36	17,332,128		2,854,746	0.84	0.92	79	2,609		
hs1-T2T-CHM13v2.0	MS20-CUTnRUN-H3K9me3_HEK293T_SETDB1_KO_clone_2	3,440,348	2x36	5,321,516		1,138,868	0.84	0.94	142	389		
hs1-T2T-CHM13v2.0	MS21-CUTnRUN-H3K9me3_HEK293T_HA-TASOR2	3,157,690	2x36	4,398,462		1,475,352	0.85	0.93	9,714	42,840		
hs1-T2T-CHM13v2.0	MS22-CUTnRUN-H3K9me3_HEK293T_HA-TASOR2	2,902,680	2x36	3,940,058		1,278,064	0.85	0.93	6,909	30,695		
hs1-T2T-CHM13v2.0	MS23-CUTnRUN-H3K9me3_HEK293T_HA-TASOR2_TASOR2_KO_population_1	2,859,696	2x36	4,147,570		1,403,944	0.84	0.94	8,199	38,333		
hs1-T2T-CHM13v2.0	MS24-CUTnRUN-H3K9me3_HEK293T_HA-TASOR2_TASOR2_KO_population_2	3,342,098	2x36	4,470,910		1,523,906	0.84	0.90	10,895	47,397		
hs1-T2T-CHM13v2.0	MS25-CUTnRUN-H3K9me3_HEK293T_HA-TASOR2_TASOR2_KO_population_3	3,243,308	2x36	4,649,344		1,435,978	0.86	0.94	2,469	9,106		
hs1-T2T-CHM13v2.0	MS26-CUTnRUN-H3K9me3_HEK293T_HA-TASOR2_TASOR2_KO_population_4	2,838,569	2x36	4,039,384		1,276,152	0.86	0.94	1,399	5,788		
hs1-T2T-CHM13v2.0	MS27-CUTnRUN-H3K9me3_HEK293T_TASOR_KO_clone_1_TASOR2_KO_populat	2,917,180	2x36	4,235,682		1,248,698	0.86	0.94	183	775		
hs1-T2T-CHM13v2.0	MS28-CUTnRUN-H3K9me3_HEK293T_TASOR_KO_clone_1_TASOR2_KO_populat	4,816,319	2x36	7,069,228		1,902,402	0.85	0.93	1,423	4,446		
hs1-T2T-CHM13v2.0	MS29-CUTnRUN-HA_HEK293T_WT	4,786,660	2x36	7,317,512		1,169,538	0.86	0.89	10	1,837		
hs1-T2T-CHM13v2.0	MS3-CUTnRUN-HA_HEK293T_MPP8-FKBPm-3XHA-GFP	8,044,382	2x36	12,210,112		2,022,782	0.85	0.88	502	4,009	450	1,525
hs1-T2T-CHM13v2.0	MS30-CUTnRUN-HA_HEK293T_WT	5,703,401	2x36	8,987,436		1,430,634	0.85	0.91	11	2,033		
hs1-T2T-CHM13v2.0	MS31-CUTnRUN-HA_HEK293T_MPP8-FKBPm-3XHA-GFP	6,046,313	2x36	9,382,358		1,563,650	0.86	0.91	10	2,716	0	0
hs1-T2T-CHM13v2.0	MS32-CUTnRUN-HA_HEK293T_MPP8-FKBPm-3XHA-GFP	4,662,005	2x36	7,291,522		1,203,176	0.87	0.91	10	2,717	0	0
hs1-T2T-CHM13v2.0	MS35-CUTnRUN-GFP_HEK293T_WT	5,204,324	2x36	7,748,286		1,223,746	0.84	0.86	52	3,331		

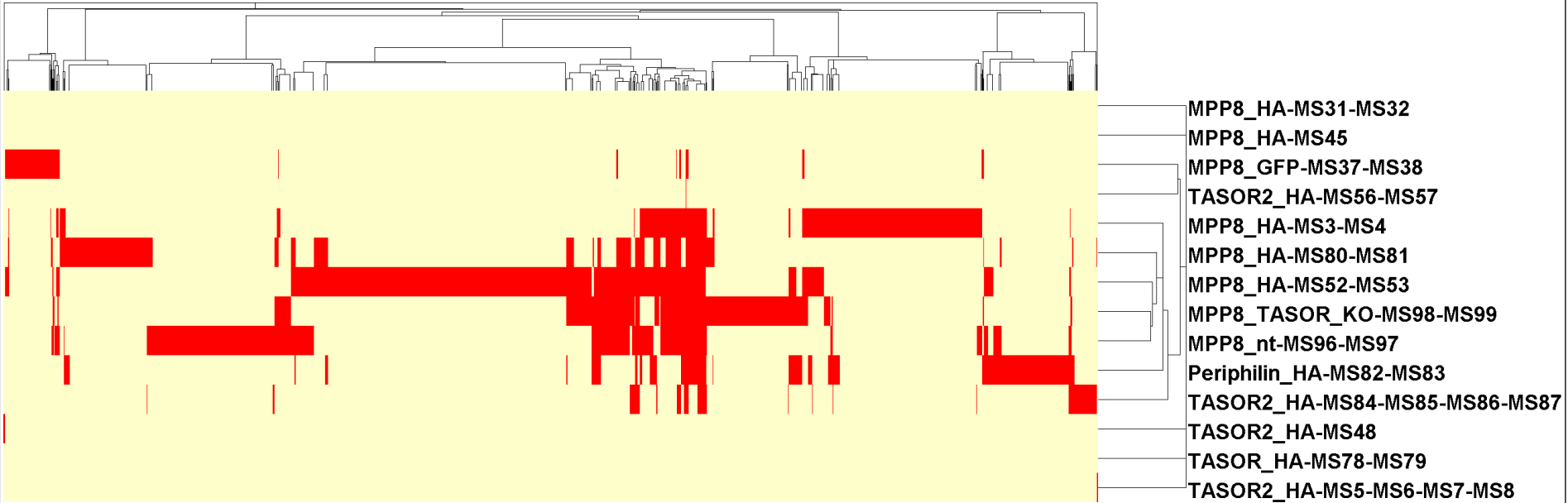
Mapping stats (2x36mers)

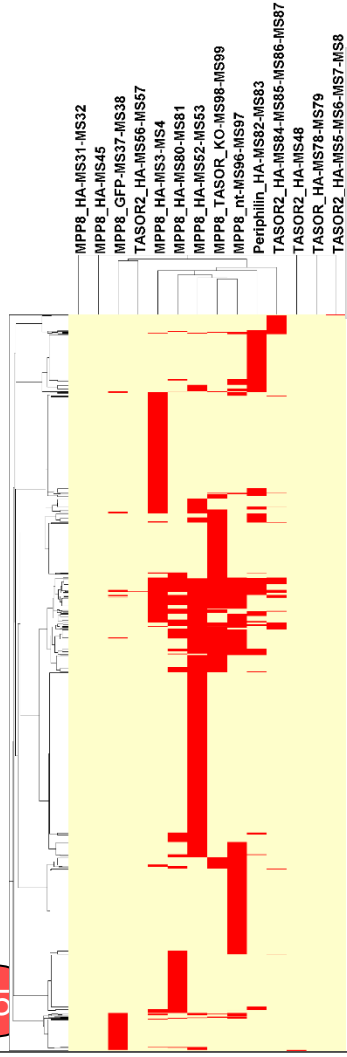
Species	#	Raw fragments	Read Length	Unique	Unique dedup	Multi	Complexity	Alignment fraction	MACS2 NumPeaks	MACS2 RPM	MACS2 post-IDR NumPeaks	MACS2 post-IDR RPM
hs1-T2T-CHM13v2.0	MS36-CUTnRUN-GFP_HEK293T_WT	5,631,578	2x36	8,220,746		1,289,530	0.84	0.84	101	3,615		
hs1-T2T-CHM13v2.0	MS37-CUTnRUN-GFP_HEK293T_MPP8-FKBPm-3XHA-GFP	5,593,826	2x36	8,537,068		1,377,530	0.85	0.89	124	2,462	114	729
hs1-T2T-CHM13v2.0	MS38-CUTnRUN-GFP_HEK293T_MPP8-FKBPm-3XHA-GFP	7,337,172	2x36	11,486,684		1,859,430	0.86	0.91	74	3,080	114	499
hs1-T2T-CHM13v2.0	MS4-CUTnRUN-HA_HEK293T_MPP8-FKBPm-3XHA-GFP	9,157,677	2x36	13,707,232		2,279,794	0.85	0.87	524	4,542	450	1,503
hs1-T2T-CHM13v2.0	MS41-CUTnRUN-H3K4me3_HEK293T_WT	7,017,930	2x36	11,453,946		1,103,618	0.74	0.89	14,112	453,943	17,109	500,184
hs1-T2T-CHM13v2.0	MS42-CUTnRUN-H3K4me3_HEK293T_WT	10,034,506	2x36	14,332,412		4,823,286	0.87	0.95	11,653	24,945	17,109	56,110
hs1-T2T-CHM13v2.0	MS43-CUTnRUN-IgG_HEK293T_WT	6,000,195	2x36	8,770,884		1,370,864	0.85	0.85	14	2,623		
hs1-T2T-CHM13v2.0	MS44-CUTnRUN-HA_HEK293_WT	6,607,016	2x36	10,026,210		1,780,074	0.86	0.89	14	1,423		
hs1-T2T-CHM13v2.0	MS45-CUTnRUN-HA_HEK293T_MPP8-FKBPm-3XHA-GFP	4,984,918	2x36	7,627,614		1,349,490	0.85	0.90	59	2,219	0	0
hs1-T2T-CHM13v2.0	MS48-CUTnRUN-HA_HEK293T_HA-TASOR2	7,822,277	2x36	11,560,482		2,089,942	0.87	0.87	16	1,241	3	5
hs1-T2T-CHM13v2.0	MS5-CUTnRUN-HA_HEK293T_TASOR2-FKBPm-3XHA-GFP	4,060,285	2x36	5,598,572		851,816	0.83	0.79	6	1,743	2	18
hs1-T2T-CHM13v2.0	MS50-CUTnRUN-HA_HEK293T_WT	24,746,468	2x36	36,195,856		6,626,232	0.92	0.87	46	2,289		
hs1-T2T-CHM13v2.0	MS51-CUTnRUN-HA_HEK293T_WT	17,971,999	2x36	25,846,468		4,881,202	0.92	0.85	45	2,776		
hs1-T2T-CHM13v2.0	MS52-CUTnRUN-HA_HEK293T_MPP8-FKBPm-3XHA-GFP	15,531,338	2x36	22,978,500		4,187,684	0.91	0.87	390	3,595	785	2,589
hs1-T2T-CHM13v2.0	MS53-CUTnRUN-HA_HEK293T_MPP8-FKBPm-3XHA-GFP	11,541,081	2x36	17,272,858		2,999,076	0.89	0.88	294	3,473	785	3,093
hs1-T2T-CHM13v2.0	MS54-CUTnRUN-HA	26,970,412	2x36	39,480,638		7,660,882	0.91	0.87	81	2,700		
hs1-T2T-CHM13v2.0	MS55-CUTnRUN-HA	9,604,665	2x36	14,232,710		2,415,162	0.91	0.87	15	1,917		
hs1-T2T-CHM13v2.0	MS56-CUTnRUN-HA_HEK293T_HA-TASOR2	28,984,517	2x36	40,824,572		7,599,200	0.93	0.84	123	2,124	1	5
hs1-T2T-CHM13v2.0	MS57-CUTnRUN-HA_HEK293T_HA-TASOR2	9,252,430	2x36	13,841,954		2,333,108	0.90	0.87	16	3,366	1	3
hs1-T2T-CHM13v2.0	MS58_CUTnRUN-H3K9me3_K562_non-targeting_CRISPR_Cas9_population_1	12,559,229	2x36	19,996,052		3,693,286	0.92	0.94	219	3,122		
hs1-T2T-CHM13v2.0	MS59_CUTnRUN-H3K9me3_K562_non-targeting_CRISPR_Cas9_population_2	14,239,259	2x36	22,771,782		4,302,704	0.92	0.95	492	4,456		
hs1-T2T-CHM13v2.0	MS6-CUTnRUN-HA_HEK293T_TASOR2-FKBPm-3XHA-GFP	7,695,799	2x36	10,708,588		1,703,456	0.84	0.81	12	2,992	2	34
hs1-T2T-CHM13v2.0	MS60_CUTnRUN-H3K9me3_K562_TASOR_CRISPR_Cas9_population_1	19,468,737	2x36	31,235,544		5,987,040	0.91	0.96	2,551	6,409		
hs1-T2T-CHM13v2.0	MS61_CUTnRUN-H3K9me3_K562_TASOR_CRISPR_Cas9_population_2	18,761,130	2x36	30,130,226		5,737,376	0.91	0.96	2,158	6,178		
hs1-T2T-CHM13v2.0	MS62_CUTnRUN-H3K9me3_K562_TASOR2_CRISPR_Cas9_population_1	20,589,089	2x36	32,756,978		6,629,798	0.91	0.96	4,469	7,630		
hs1-T2T-CHM13v2.0	MS63_CUTnRUN-H3K9me3_K562_TASOR2_CRISPR_Cas9_population_2	16,946,529	2x36	26,712,936		5,426,478	0.91	0.95	1,532	4,157		
hs1-T2T-CHM13v2.0	MS7-CUTnRUN-HA_HEK293T_TASOR2-FKBPm-3XHA-GFP	3,070,341	2x36	4,165,190		649,198	0.84	0.78	5	2,085	2	32
hs1-T2T-CHM13v2.0	MS76-CUTnRUN-HA_HEK293T_WT	15,677,592	2x36	23,707,538		3,588,424	0.87	0.87	24	3,084		
hs1-T2T-CHM13v2.0	MS77-CUTnRUN-HA_HEK293T_WT	16,895,827	2x36	26,082,506		3,970,354	0.87	0.89	19	2,598	0	0
hs1-T2T-CHM13v2.0	MS78-CUTnRUN-HA_HEK293T_HA-TASOR	22,406,033	2x36	34,751,944		5,840,844	0.88	0.91	33	721	0	0
hs1-T2T-CHM13v2.0	MS79-CUTnRUN-HA_HEK293T_HA-TASOR	18,589,653	2x36	28,704,782		4,722,668	0.88	0.90	23	685		
hs1-T2T-CHM13v2.0	MS8-CUTnRUN-HA_HEK293T_TASOR2-FKBPm-3XHA-GFP	3,641,609	2x36	4,167,374		642,994	0.84	0.66	5	2,388	2	17
hs1-T2T-CHM13v2.0	MS80-CUTnRUN-HA_HEK293T_MPP8-FKBPm-3XHA-GFP	20,338,172	2x36	31,906,330		5,304,946	0.88	0.91	125	2,477	358	881
hs1-T2T-CHM13v2.0	MS81-CUTnRUN-HA_HEK293T_MPP8-FKBPm-3XHA-GFP	18,089,729	2x36	28,406,080		4,644,684	0.88	0.91	151	2,279	358	1,005
hs1-T2T-CHM13v2.0	MS82-CUTnRUN-HA_HEK293T_Periphilin-HA	23,377,542	2x36	36,219,476		5,671,982	0.88	0.90	134	1,518	306	555
hs1-T2T-CHM13v2.0	MS83-CUTnRUN-HA_HEK293T_Periphilin-HA	18,712,121	2x36	28,668,580		4,466,554	0.88	0.89	61	1,243	306	510
hs1-T2T-CHM13v2.0	MS84-CUTnRUN-HA_HEK293T_HA-TASOR2_sub-clone_1	20,238,463	2x36	31,398,182		5,129,968	0.87	0.90	40	1,572	106	162
hs1-T2T-CHM13v2.0	MS85-CUTnRUN-HA_HEK293T_HA-TASOR2_sub-clone_11	21,423,840	2x36	33,126,052		5,112,688	0.86	0.89	63	2,437	106	209
hs1-T2T-CHM13v2.0	MS86-CUTnRUN-HA_HEK293T_HA-TASOR2_sub-clone_12	17,270,134	2x36	26,407,152		4,223,490	0.87	0.89	50	2,098	106	184
hs1-T2T-CHM13v2.0	MS87-CUTnRUN-HA_HEK293T_HA-TASOR2_sub-clone_11	23,035,548	2x36	35,817,386		5,861,426	0.87	0.90	51	2,334	106	164
hs1-T2T-CHM13v2.0	MS9-CUTnRUN-HA_HEK293T_HA-TASOR2	4,691,782	2x36	6,390,980		1,002,582	0.85	0.79	56	2,220		
hs1-T2T-CHM13v2.0	MS96-CUTnRUN-MPP8_WT_non-targeting_sgRNA_transfected	11,523,699	2x36	17,442,322		2,924,180	0.89	0.88	84	3,553	517	1,894
hs1-T2T-CHM13v2.0	MS97-CUTnRUN-MPP8_WT_non-targeting_sgRNA_transfected	14,093,782	2x36	21,521,170		3,538,482	0.89	0.89	187	3,926	517	2,025
hs1-T2T-CHM13v2.0	MS98-CUTnRUN-MPP8_TASOR_KO_population_1	14,685,206	2x36	22,176,596		3,856,620	0.89	0.89	208	3,071	434	1,069
hs1-T2T-CHM13v2.0	MS99-CUTnRUN-MPP8_TASOR_KO_population_1	13,223,076	2x36	20,101,610		3,313,866	0.89	0.89	244	3,636	434	1,417

Peak overlap

#DataSet:		H3K4me3-MS41-MS42	MPP8_GFP-MS37-MS38	MPP8_HA-MS3-MS4	MPP8_HA-MS31-MS32	MPP8_HA-MS45	MPP8_HA-MS52-MS53	MPP8_HA-MS80-MS81	MPP8_TASOR_KO-MS98-MS99	MPP8_nt-MS96-MS97	Periphilin_HA-MS82-MS83	TASOR2_HA-MS5-MS6-MS7-MS8	TASOR2_HA-MS56-MS57	TASOR2_HA-MS84-MS85-MS86-MS87	TASOR_HA-MS78-MS79	TSOR2_HA-MS48
Regions		17,109	114	450	0	0	785	358	434	517	306	2	1	106	0	3
H3K4me3-MS41-MS42	17,109	1.00	0.00	0.02	0.00	0.00	0.03	0.01	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00
MPP8_GFP-MS37-MS38	114	0.66	1.00	0.32	0.00	0.00	0.61	0.41	0.33	0.55	0.11	0.00	0.01	0.13	0.00	0.00
MPP8_HA-MS3-MS4	450	0.85	0.09	1.00	0.00	0.00	0.42	0.26	0.32	0.36	0.24	0.00	0.00	0.09	0.00	0.00
MPP8_HA-MS31-MS32	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MPP8_HA-MS45	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MPP8_HA-MS52-MS53	785	0.64	0.09	0.25	0.00	0.00	1.00	0.28	0.33	0.41	0.16	0.00	0.00	0.07	0.00	0.00
MPP8_HA-MS80-MS81	358	0.63	0.14	0.33	0.00	0.00	0.61	1.00	0.43	0.57	0.25	0.00	0.00	0.15	0.00	0.00
MPP8_TASOR_KO-MS98-MS99	434	0.78	0.09	0.33	0.00	0.00	0.58	0.36	1.00	0.48	0.25	0.00	0.00	0.14	0.00	0.00
MPP8_nt-MS96-MS97	517	0.67	0.11	0.31	0.00	0.00	0.59	0.37	0.39	1.00	0.21	0.00	0.00	0.12	0.00	0.00
Periphilin_HA-MS82-MS83	306	0.83	0.04	0.35	0.00	0.00	0.42	0.30	0.37	0.37	1.00	0.00	0.00	0.14	0.00	0.00
TASOR2_HA-MS5-MS6-MS7-MS8	2	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
TASOR2_HA-MS56-MS57	1	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
TASOR2_HA-MS84-MS85-MS86-MS87	106	0.64	0.14	0.41	0.00	0.00	0.53	0.50	0.58	0.58	0.40	0.00	0.01	1.00	0.00	0.00
TASOR_HA-MS78-MS79	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TSOR2_HA-MS48	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00

Peak overlap





MS1-CU/TnRUN-
HA_HEK293T_WT

MS2-CU/TnRUN-
HA_HEK293_WT

MS3-CU/TnRUN-
HA_HEK293T_MPP8-FKBPm
3XHA-GFP

MS4-CU/TnRUN-
HA_HEK293T_MPP8-FKBPm
3XHA-GFP

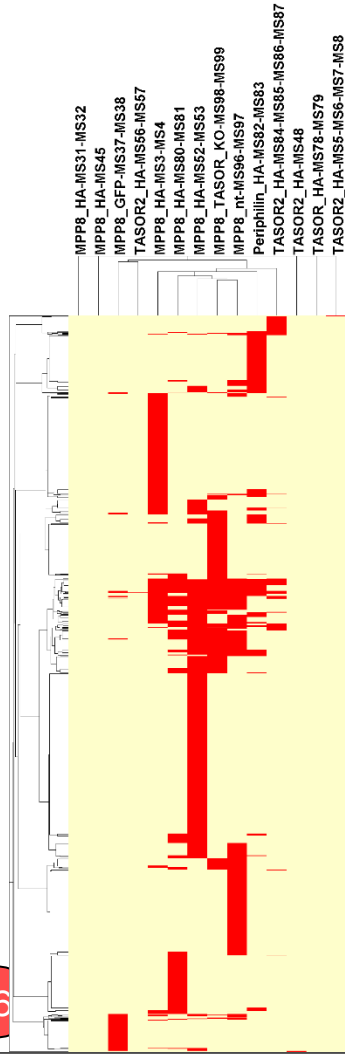
MS5-CU/TnRUN-
HA_HEK293T_TASOR2-
FKBPm-3XHA-GFP

MS6-CU/TnRUN-
HA_HEK293T_TASOR2-
FKBPm-3XHA-GFP

MS7-CU/TnRUN-
HA_HEK293T_TASOR2-
FKBPm-3XHA-GFP

MS8-CU/TnRUN-
HA_HEK293T_TASOR2-
FKBPm-3XHA-GFP

MS9-CU/TnRUN-
HA_HEK293T_HA-TASOR2



MS10-CUTnRUN-
H3K4me3_HEK293T_WT

MS11-CUTnRUN-
H3K9me3_HEK293T_WT

MS13-CUTnRUN-
H3K9me3_HEK293T_TASOR
_KO_clone_1

MS15-CUTnRUN-
H3K9me3_HEK293T_MPP8_
KO_clone_1

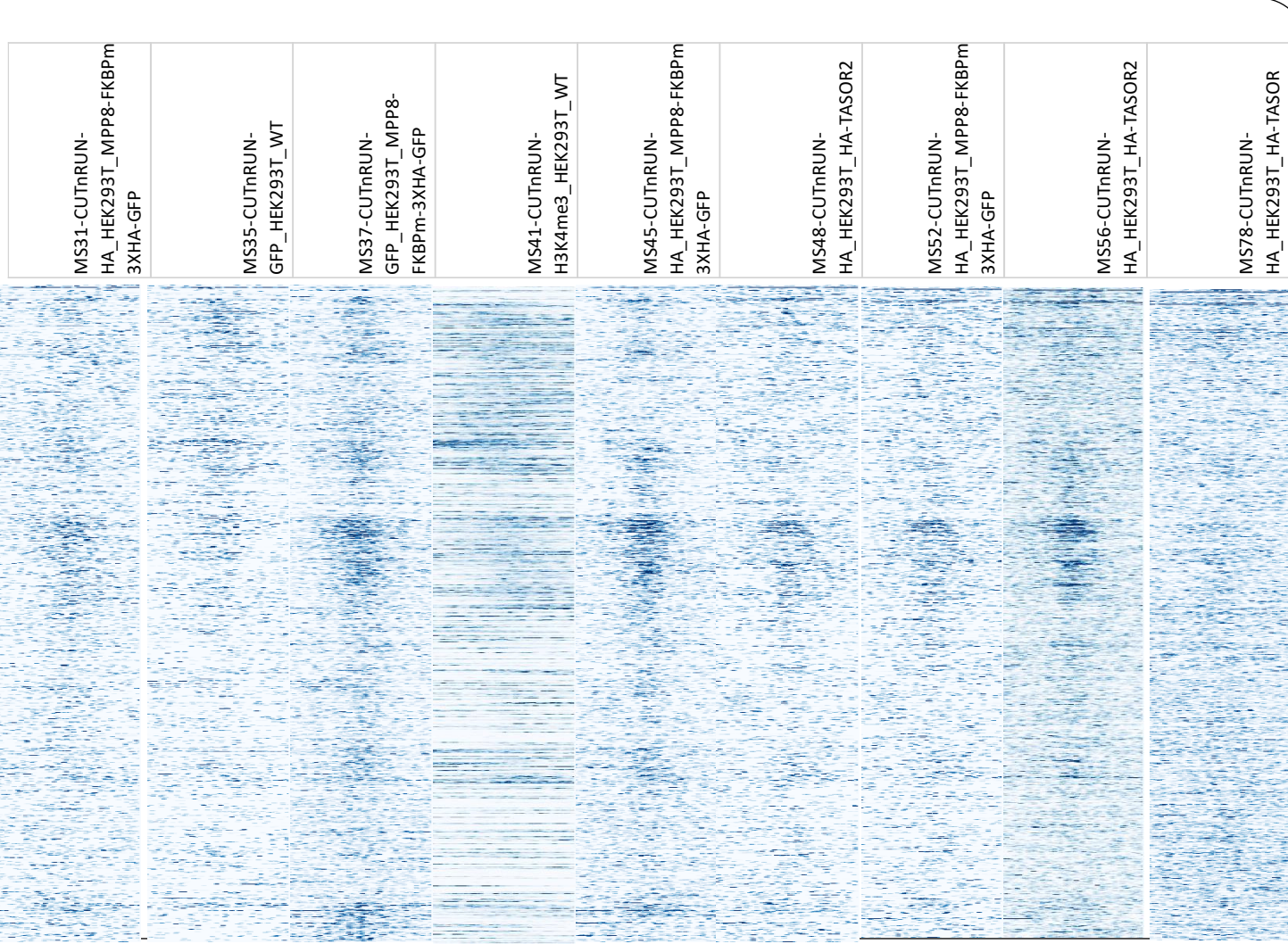
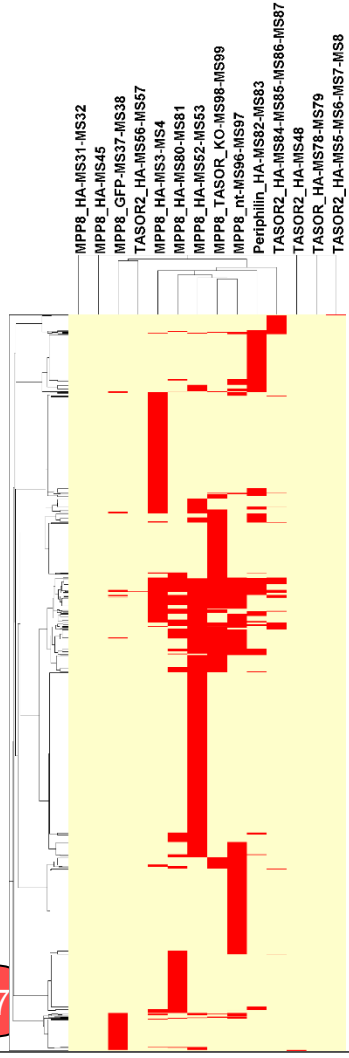
MS17-CUTnRUN-
H3K9me3_HEK293T_PPHLN
1_KO_clone_1

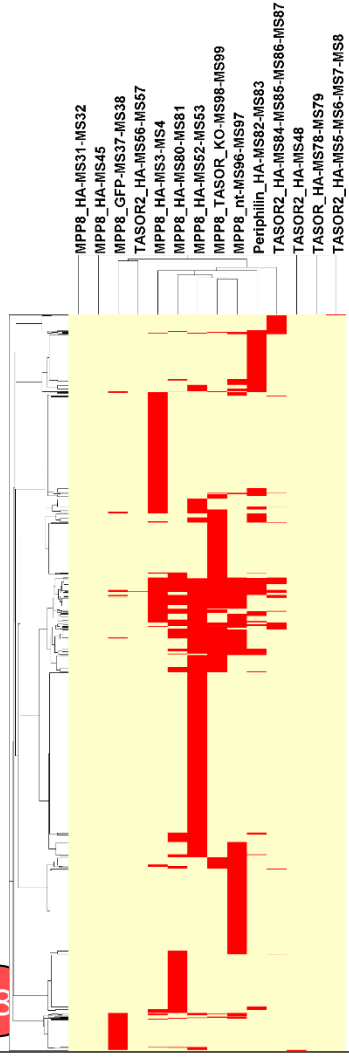
MS19-CUTnRUN-
H3K9me3_HEK293T_SETDB1
_KO_clone_1

MS21-CUTnRUN-
H3K9me3_HEK293T_HA-
TASOR2

MS23-CUTnRUN-
H3K9me3_HEK293T_HA-
TASOR2_TASOR2_KO_popu
lation_1

MS27-CUTnRUN-
H3K9me3_HEK293T_TASOR
_KO_clone_1_TASOR2_KO_
population_2





MS54-CUTnRUN-HA

MS58_CUTnRUN-H3K9me3_K562_non-targeting_CRISPR_Cas9_population_1

MS60_CUTnRUN-H3K9me3_K562_TASOR_CRISPR_Cas9_population_1

MS62_CUTnRUN-H3K9me3_K562_TASOR2_CRISPR_Cas9_population_1

MS80-CUTnRUN-HA_HEK293T_MPP8-FKBpm3XHA-GFP

MS82-CUTnRUN-HA_HEK293T_Periphilin-HA

MS86-CUTnRUN-HA_HEK293T_HA-TASOR2_sub-clone_12

MS96-CUTnRUN-MPP8_WT_non-targeting_sgRNA_transfected

MS98-CUTnRUN-MPP8_TASOR2_KO_population_1

