

Supplemental Table 2 All summary stats for Cut and Run

Sample	Total Reads	% Duplication	Unique Reads	% Unique Alignment	E.coli Reads	% E.coli Alignment
IgG Control - Empty Vector	1041679	6.9	288408	27.7	113980	10.9
IgG Control - Dsup-FLAG (WT)	1216230	6.1	354426	29.1	246187	20.2
IgG Control - Dsup $\Delta$ C+NLS-FLAG	1170354	5.5	456798	39.0	199676	17.1
IgG Control - Dsup 3R/3E-FLAG	1017481	6.8	364304	35.8	205852	20.2
anti-H3K4me3 - Empty Vector	75971	6.1	55949	73.7	1391	1.8
anti-H3K4me3 - Dsup-FLAG (WT)	1267330	6.6	945712	74.6	16536	1.3
anti-H3K4me3 - Dsup $\Delta$ C+NLS-FLAG	1298827	6.6	1008447	77.6	14461	1.1
anti-H3K4me3 - Dsup 3R/3E-FLAG	1347954	7.7	1051597	78.0	22167	1.6
anti-FLAG -Empty Vector	1223830	7.5	745118	60.9	140553	11.5
anti-FLAG - Dsup-FLAG (WT)	1127468	6.0	850732	75.5	28284	2.5
anti-FLAG - Dsup $\Delta$ C+NLS-FLAG	1315602	6.6	741120	56.3	149760	11.4
anti-FLAG - Dsup 3R/3E-FLAG	1267766	7.5	783729	61.8	50576	4.0
<b>Averages</b>	<b>1114208</b>	<b>6.7</b>	<b>637195</b>	<b>57.5</b>	<b>99119</b>	<b>8.6</b>