Astral software version 1.1											
DIA	**low load single cell (LSC)**						**Label-Free Quan**	**Plasma Profiling**	**System Evaluation**	**Immunopeptidomics MHC Class I**	
	single cell	**<250 pg**	**250-1000 pg**	**1-2 ng**	**2-5 ng**	**5-10 ng**				**high load**	**low load**
Method length	25 min	25 min	25 min	25 min	25 min	25 min	24 min	24 min	7 min	72 min	72 min
Full scan											
analyzer	OT	OT	OT	OT	OT	OT	OT	OT	OT	OT	OT
resolution	240k	240k	240k	240k	240k	240k	240k	240k	240k	120k	120k
mz range	400-800	400-800	400-800	400-800	400-800	400-800	380-980	380-980	380-980	350-800	350-800
RF lens	45	45	45	45	45	45	40	40	40	45	45
AGC	500	500	500	500	500	500	500	500	500	300	300
IT	100	100	100	100	100	100	5	10	3	100	100
microscans	1	1	1	1	1	1	1	1	1	1	1
data type	profile	profile	profile	profile	profile	profile	profile	profile	profile	profile	profile
MS2											
	DIA	DIA	DIA	DIA	DIA	DIA	DIA	DIA	DIA	DIA	DIA
precursor mass range	400-800	400-800	400-800	400-800	400-800	400-800	380-980	380-980	380-980	350-800	350-800
DIA window	auto	auto	auto	auto	auto	auto	auto	auto	auto	auto	auto
isolation window	**20**	**20**	**20**	**10**	**8**	**5**	**2**	**3**	**2**	**4**	**4**
window overlap	0	0	0	0	0	0	0	0	0	0	0
Window placement optimization	On	On	On	On	On	On	On	On	On	On	On
Number of scan events	**19**	**19**	**19**	**39**	**49**	**79**	**299**	**199**	**299**	**112**	**112**
DIAWindow Mode	mz range	mz range	mz range	mz range	mz range	mz range	mz range	mz range	mz range	mz range	mz range
Collision engergy type	normalized	normalized	normalized	normalized	normalized	normalized	normalized	normalized	normalized	normalized	normalized
HCD collision energy	25	25	25	25	25	25	25	25	25	29	29
Detector type	Astral	Astral	Astral	Astral	Astral	Astral	Astral	Astral	Astral	Astral	Astral
TMT	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Scan Range (mz)	150-2000	150-2000	150-2000	150-2000	150-2000	150-2000	150-2000	150-2000	150-2000	100-1000	100-1000
RFLens (%)	45	45	45	45	45	45	40	40	40	45	45
AGC target	800	800	800	800	800	800	500	500	500	standard	standard
IT	**60**	**60**	**40**	**20**	**14**	**10**	**3**	**7**	**3**	**3**	**3**
microscans	1	1	1	1	1	1	1	1	1	1	1
data type	centroid	centroid	centroid	centroid	centroid	centroid	profile	profile	centroid	centroid	centroid
Loop Control	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time
Time (sec)	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6