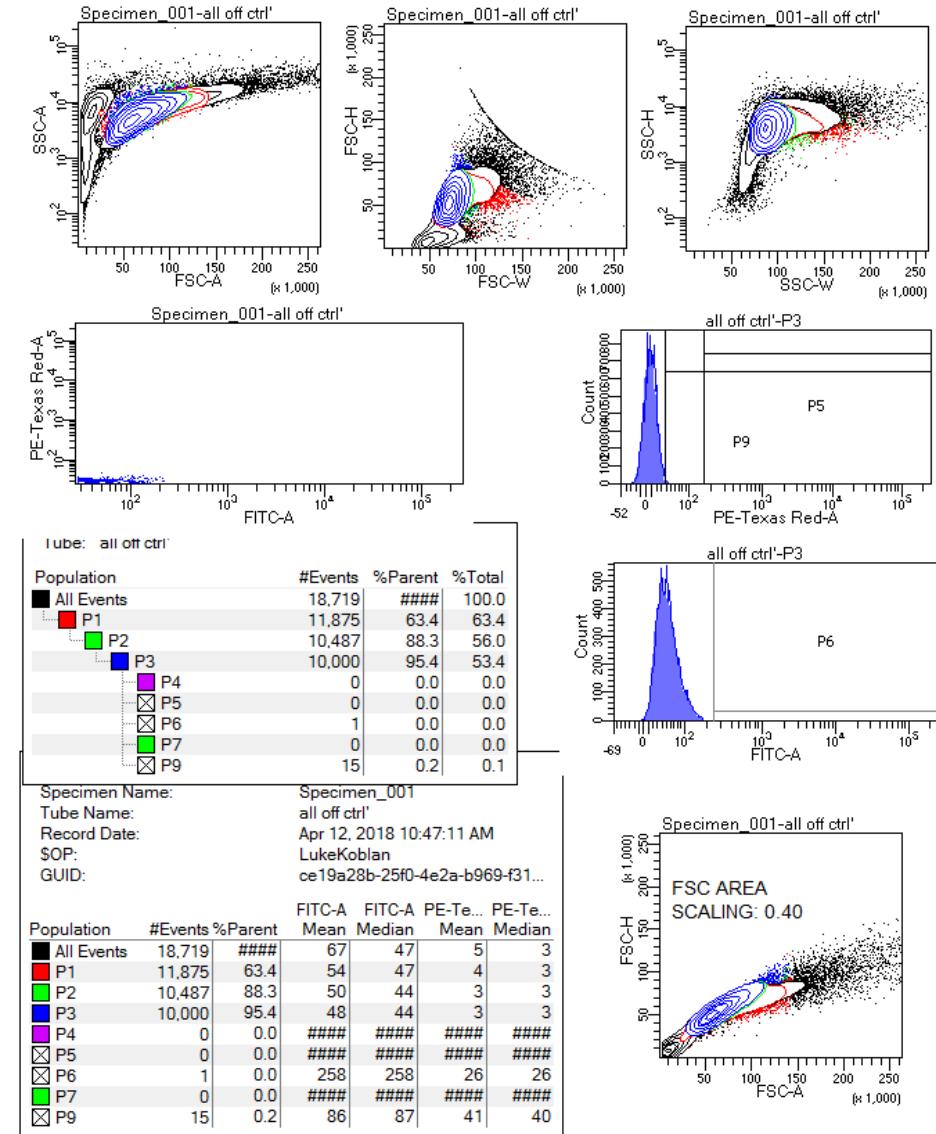
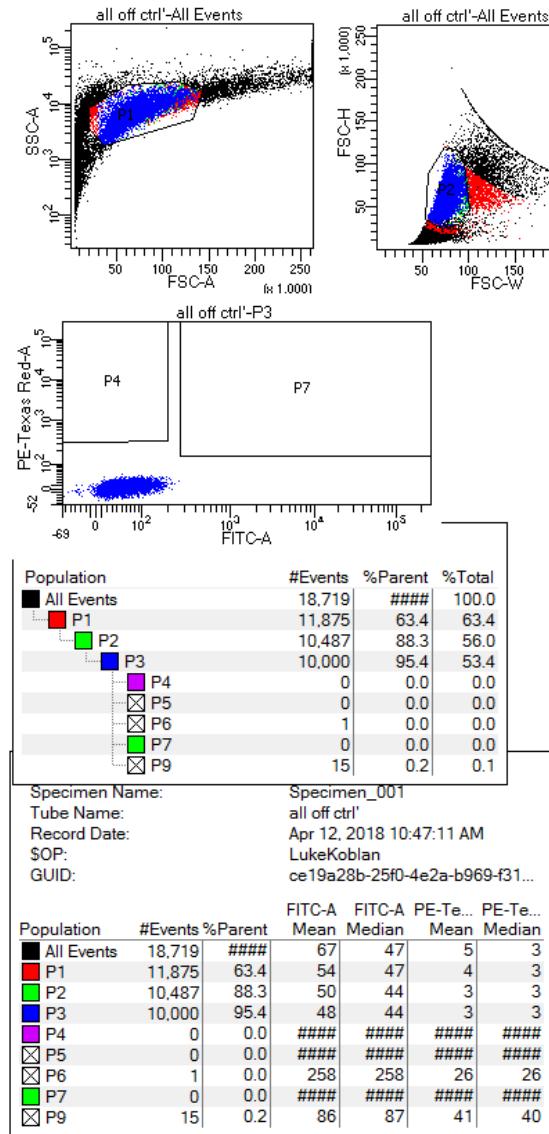
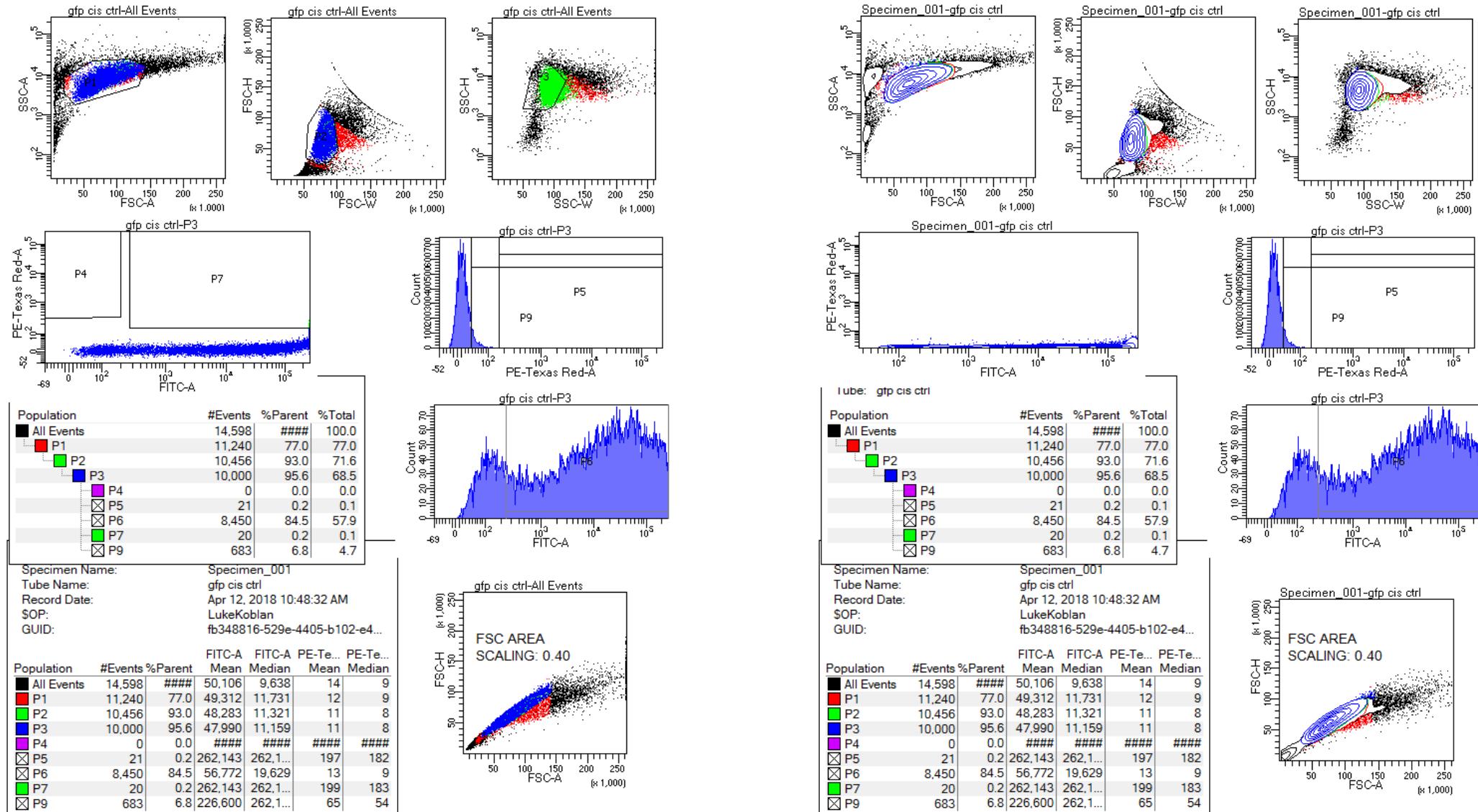


# Figure 1 Flow Sorting Controls HEK293T

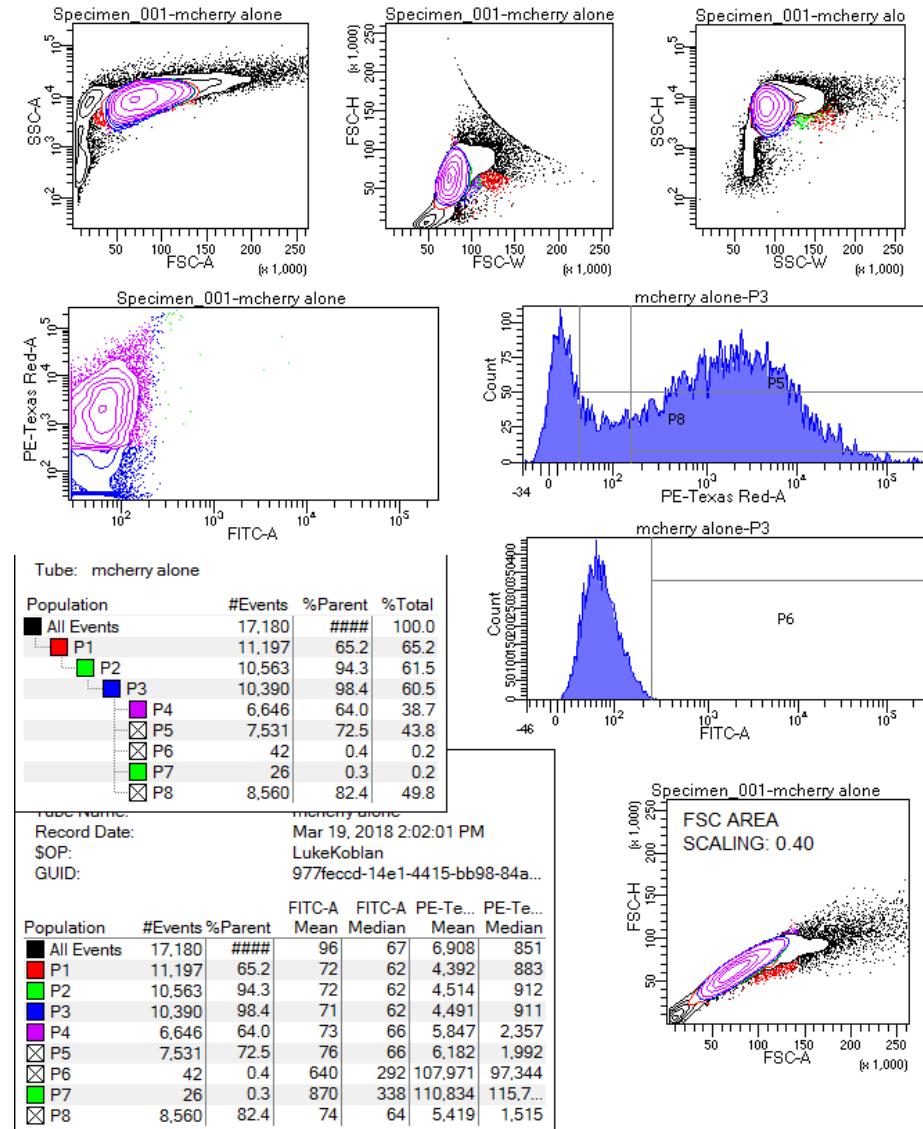
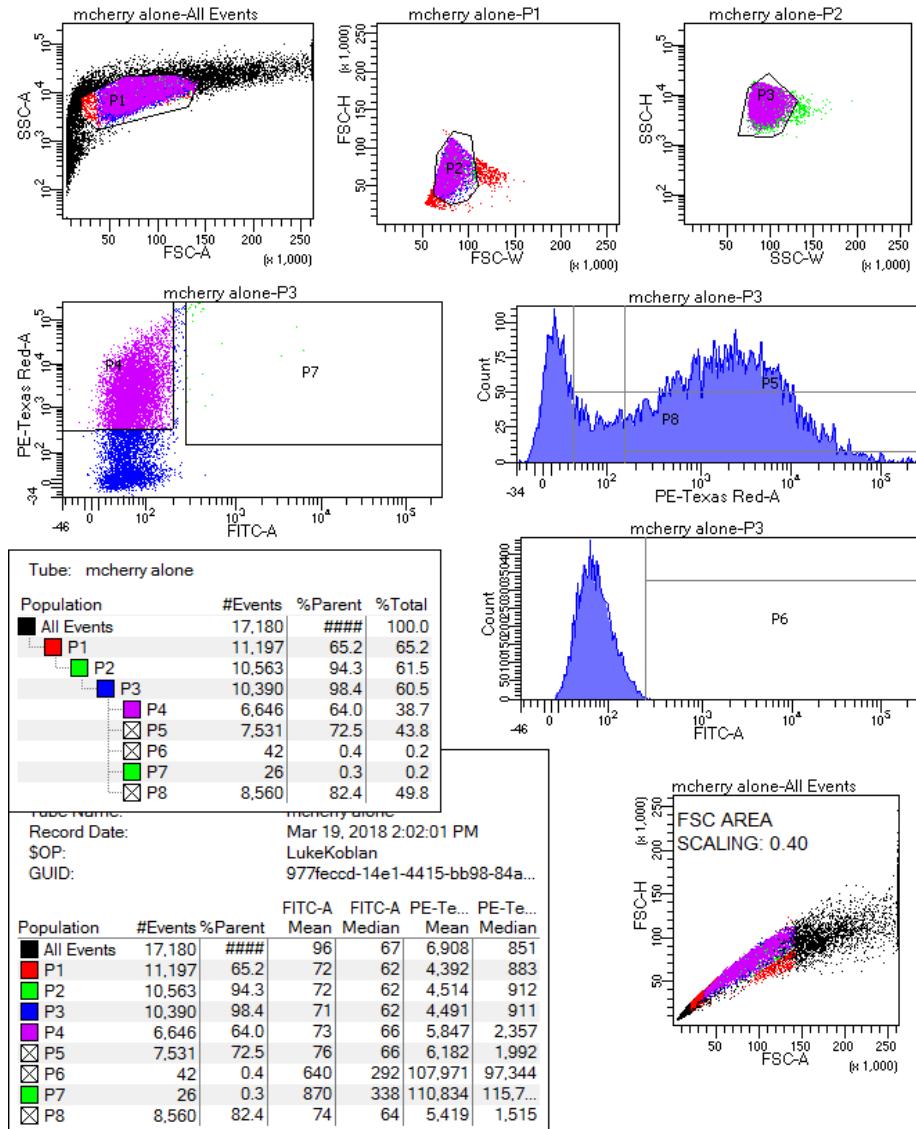
# HEK293T negative control



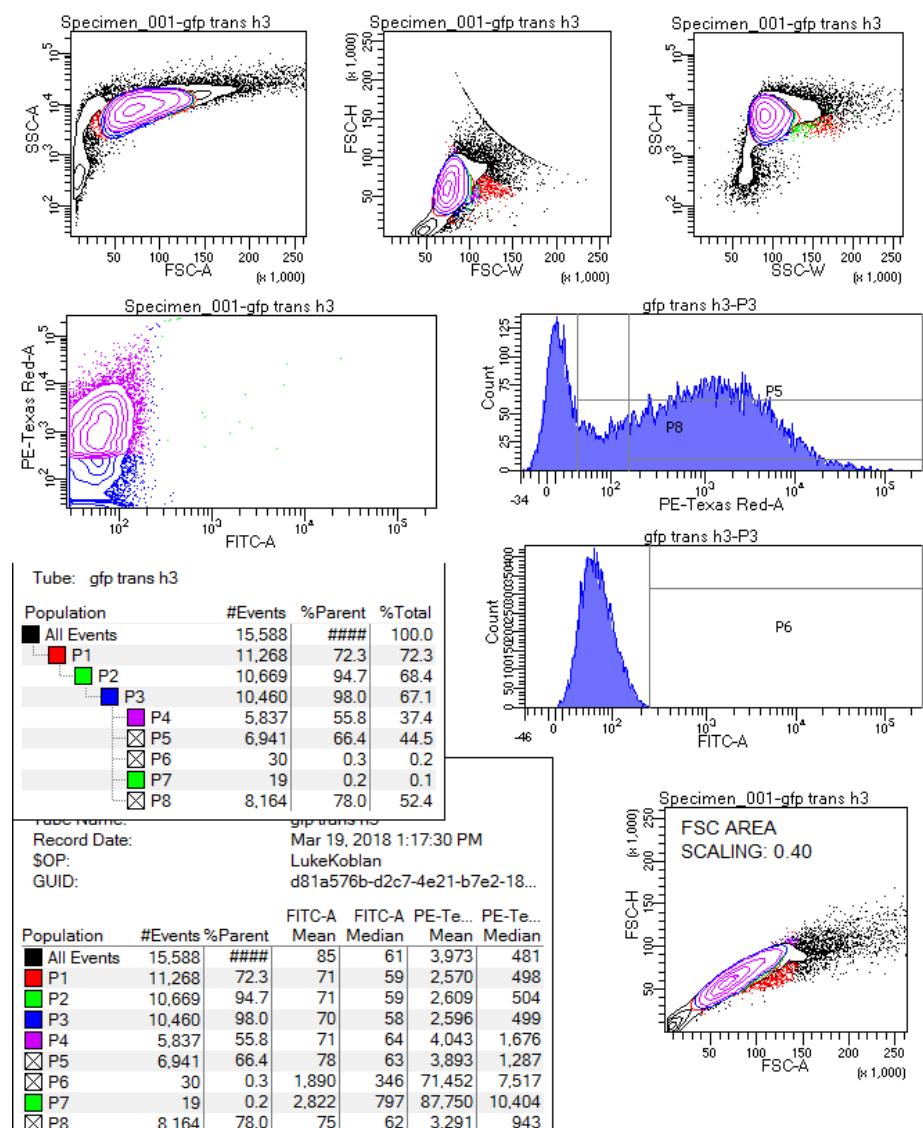
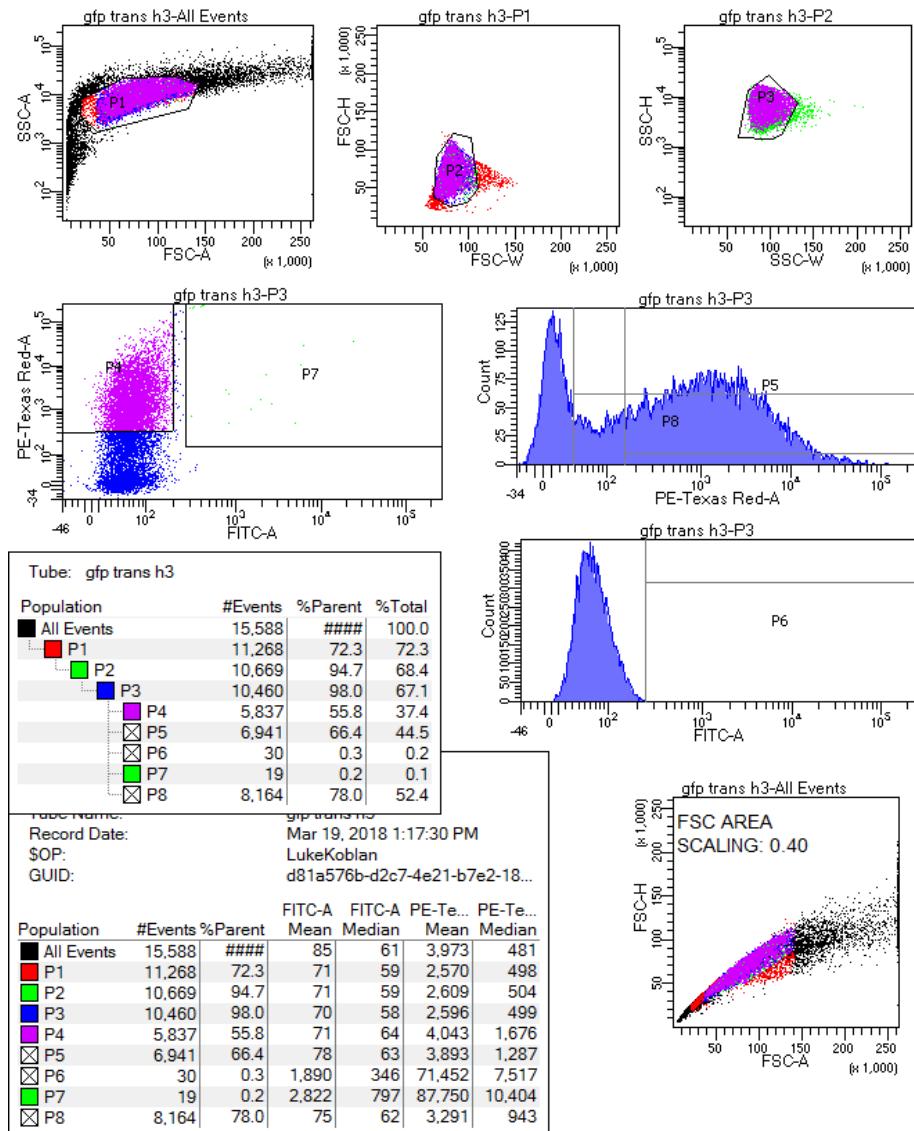
# HEK293T GFP+ control



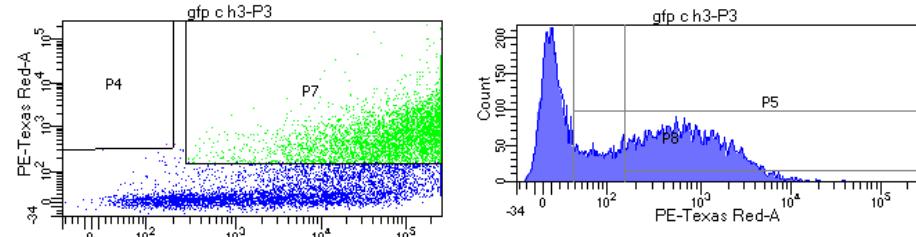
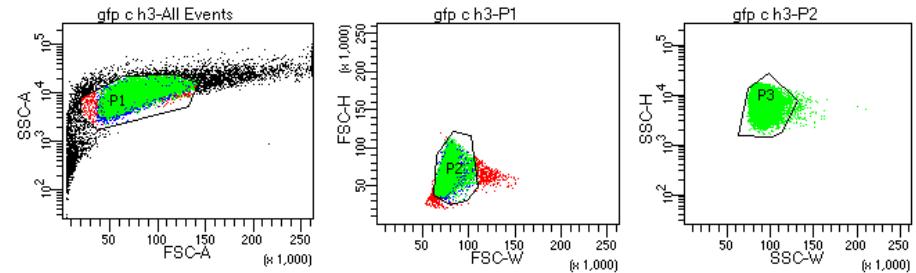
# HEK293T mCherry+ control



# Example HEK293T In trans sort



# Example HEK293T In cis sort



Tube: gfp c h3

Population	#Events	%Parent	%Total
All Events	14,735	####	100.0
P1	11,037	74.9	74.9
P2	10,483	95.0	71.1
P3	10,319	98.4	70.0
P4	2	0.0	0.0
P5	5,410	52.4	36.7
P6	9,579	92.8	65.0
P7	5,361	52.0	36.4
P8	6,820	66.1	46.3

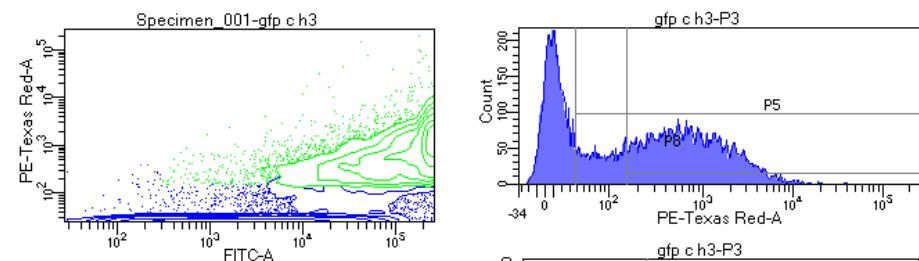
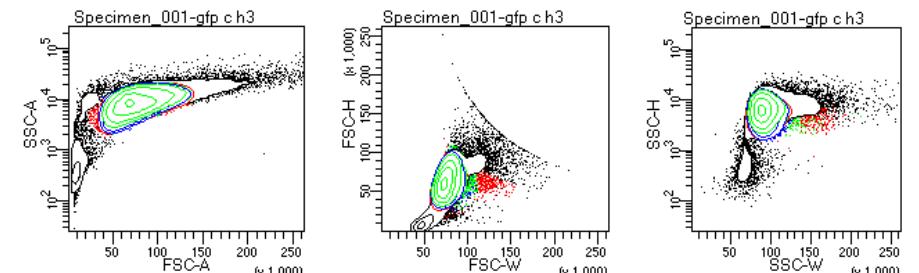
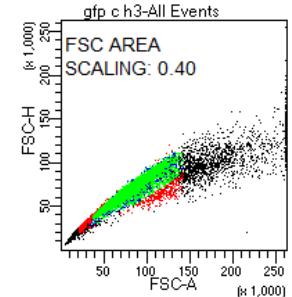
Tube Name: gfp c h3

Record Date: Mar 19, 2018 1:32:08 PM

SOP: LukeKoblan

GUID: 9133271f-c708-42c4-ae39-dfe...

Population	#Events	%Parent	FITC-A Mean	FITC-A Median	PE-Te... Mean	PE-Te... Median
All Events	14,735	####	86,695	32,042	1,144	166
P1	11,037	74.9	86,817	35,111	914	181
P2	10,483	95.0	86,602	34,550	933	182
P3	10,319	98.4	86,412	34,377	925	181
P4	2	0.0	181	181	409	409
P5	5,410	52.4	143.4...	137.6...	1,737	695
P6	9,579	92.8	93,078	44,313	996	231
P7	5,361	52.0	144.3...	140.5...	1,751	702
P8	6,820	66.1	124.2...	99,742	1,396	489



Tube: gfp c h3

Population	#Events	%Parent	%Total
All Events	14,735	####	100.0
P1	11,037	74.9	74.9
P2	10,483	95.0	71.1
P3	10,319	98.4	70.0
P4	2	0.0	0.0
P5	5,410	52.4	36.7
P6	9,579	92.8	65.0
P7	5,361	52.0	36.4
P8	6,820	66.1	46.3

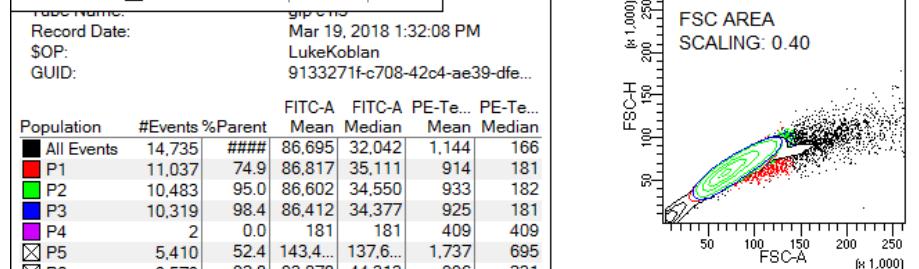
Tube Name: gfp c h3

Record Date: Mar 19, 2018 1:32:08 PM

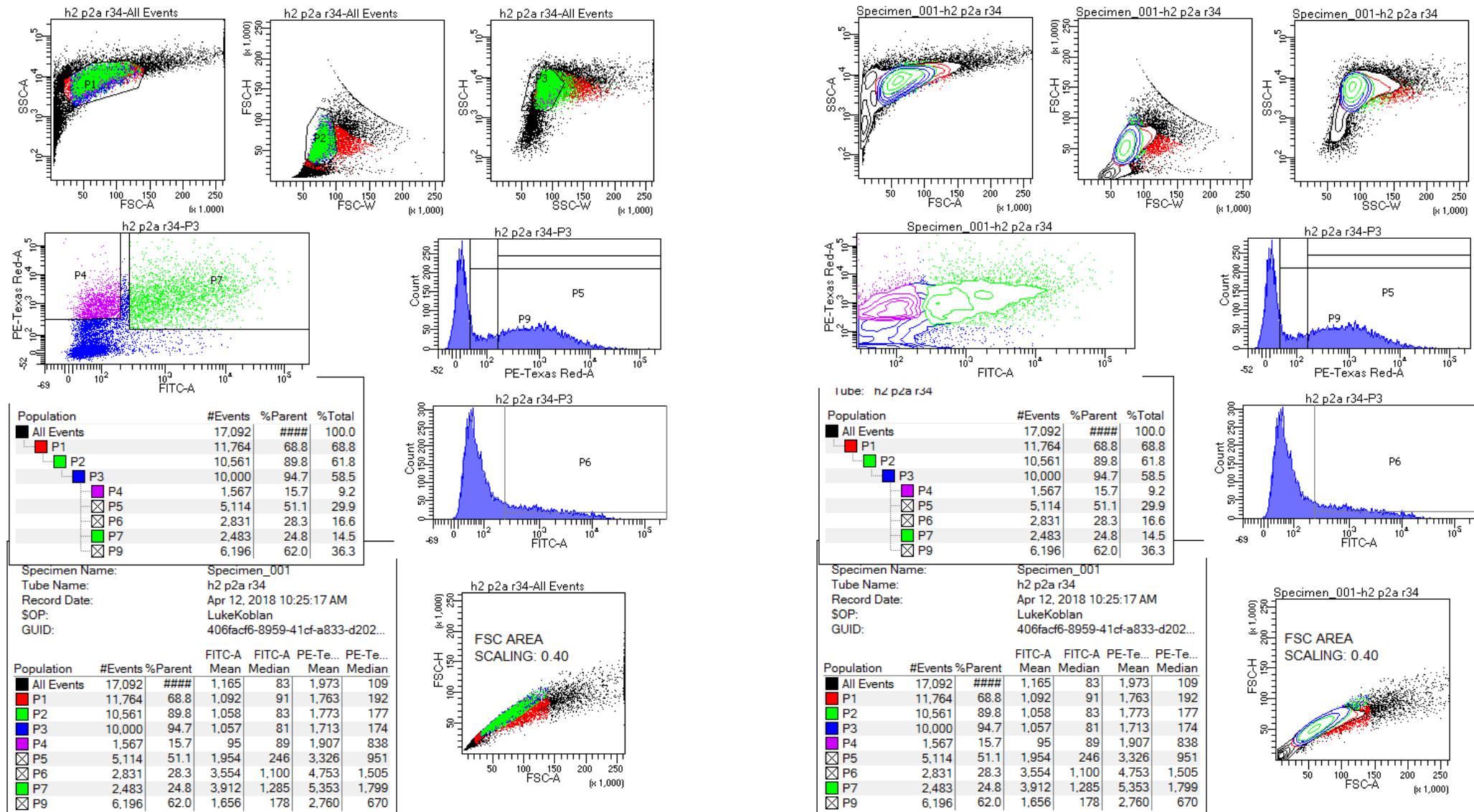
SOP: LukeKoblan

GUID: 9133271f-c708-42c4-ae39-dfe...

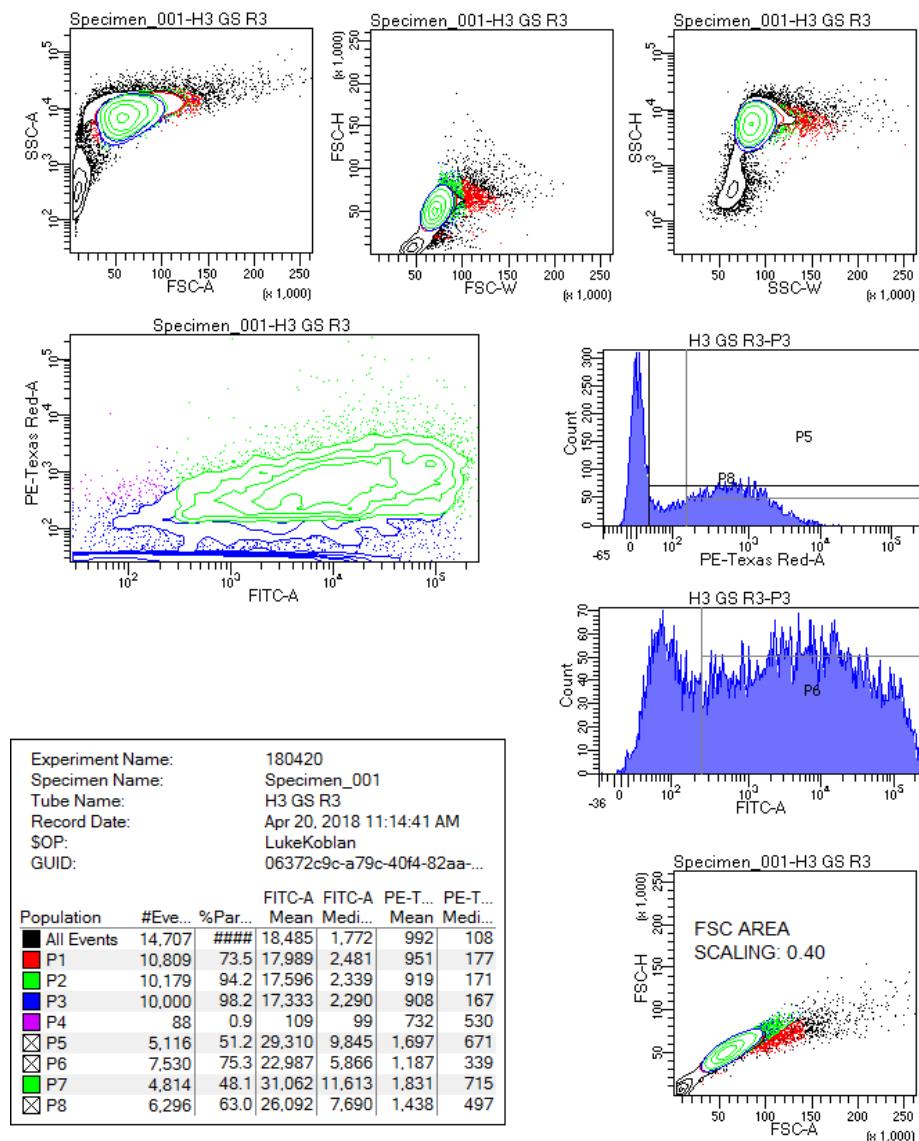
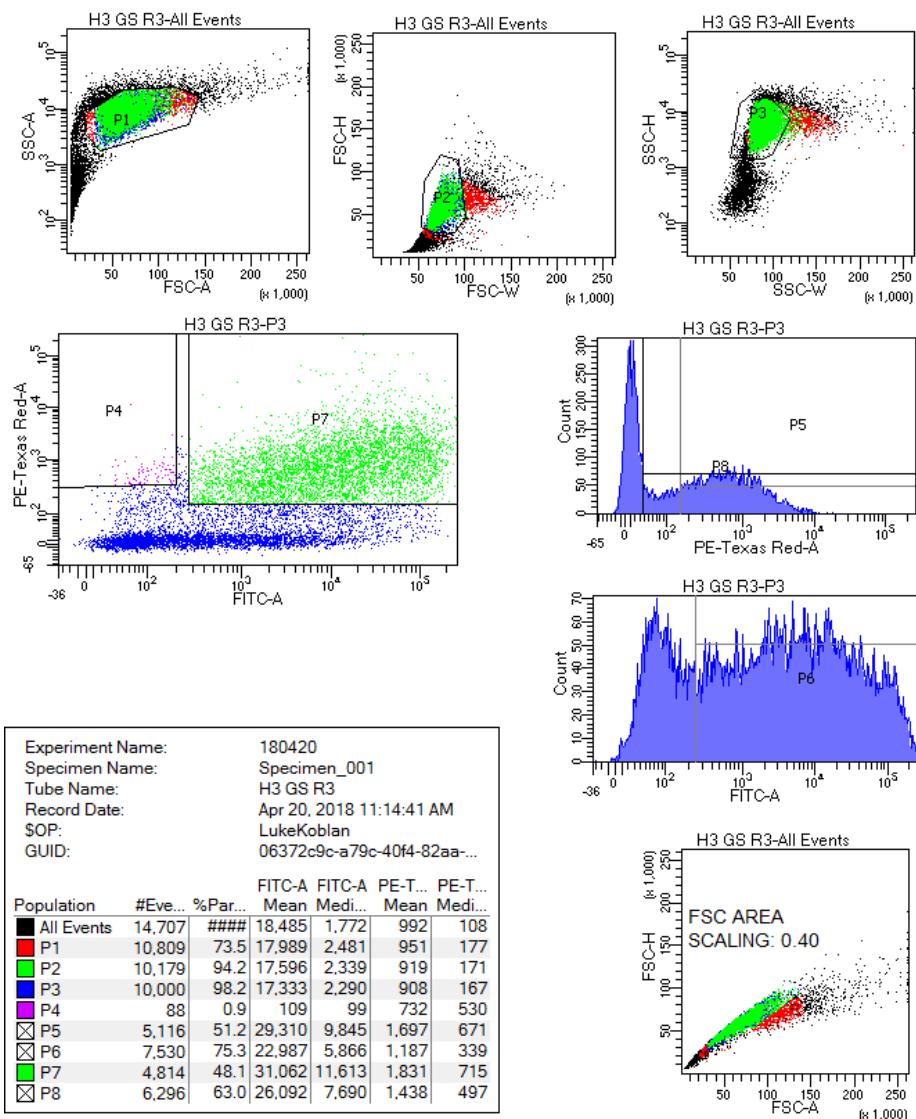
Population	#Events	%Parent	FITC-A Mean	FITC-A Median	PE-Te... Mean	PE-Te... Median
All Events	14,735	####	86,695	32,042	1,144	166
P1	11,037	74.9	86,817	35,111	914	181
P2	10,483	95.0	86,602	34,550	933	182
P3	10,319	98.4	86,412	34,377	925	181
P4	2	0.0	181	181	409	409
P5	5,410	52.4	143.4...	137.6...	1,737	695
P6	9,579	92.8	93,078	44,313	996	231
P7	5,361	52.0	144.3...	140.5...	1,751	702
P8	6,820	66.1	124.2...	99,742	1,396	489



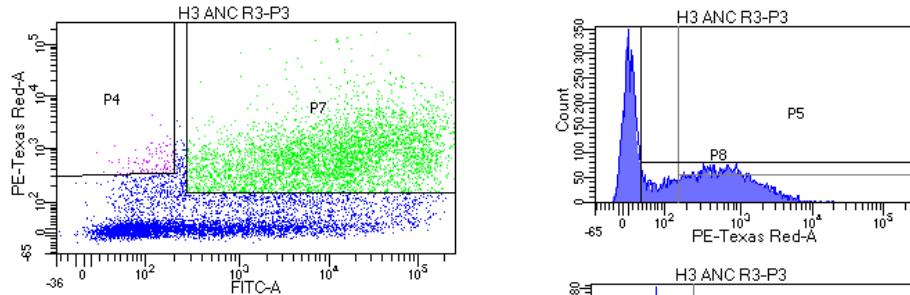
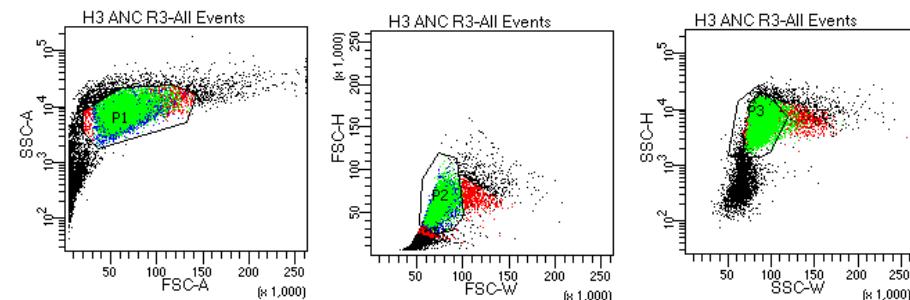
# Example HEK293T P2A sort (BE4-P2A-GFP)



# Example HEK293T P2A sort (BE4max-P2A-GFP)



# Example HEK293T P2A sort (AncBE4max-P2A-GFP)



Experiment Name: 180420

Specimen Name: Specimen\_001

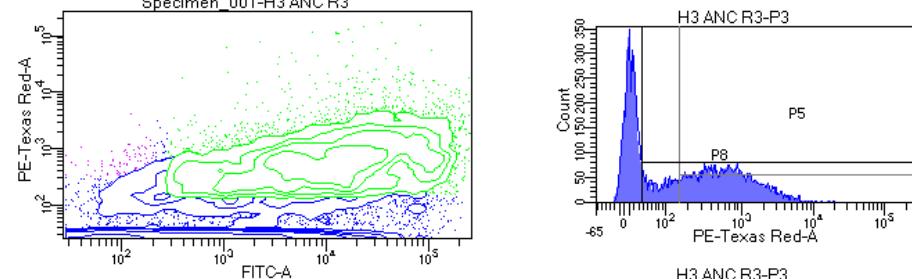
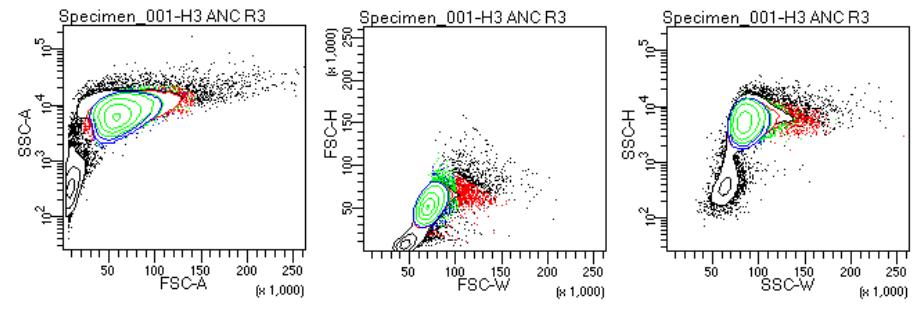
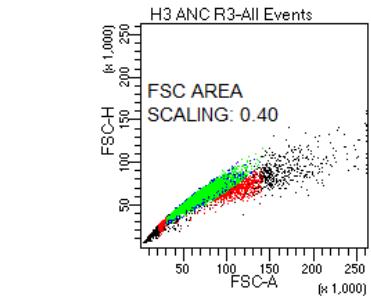
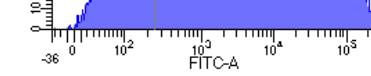
Tube Name: H3 ANC R3

Record Date: Apr 20, 2018 11:02:47 AM

SOP: LukeKoblan

GUID: 6065efc3-f34e-404a-aceb-3...

Population	#Events	%Par...	FITC-A	FITC-A	PE-T...	PE-T...
			Mean	Medi...	Mean	Medi...
All Events	14,651	####	17,454	1,352	861	81
P1	10,859	74.1	17,137	1,915	886	136
P2	10,178	93.7	16,781	1,819	869	131
P3	10,000	98.3	16,761	1,799	841	129
P4	103	1.0	117	120	672	536
P5	4,778	47.8	29,091	9,678	1,731	624
P6	7,192	71.9	23,268	5,695	1,145	294
P7	4,389	43.9	31,592	12,151	1,847	667
P8	6,021	60.2	25,996	7,144	1,392	440



Experiment Name: 180420

Specimen Name: Specimen\_001

Tube Name: H3 ANC R3

Record Date: Apr 20, 2018 11:02:47 AM

SOP: LukeKoblan

GUID: 6065efc3-f34e-404a-aceb-3...

Population	#Events	%Par...	FITC-A	FITC-A	PE-T...	PE-T...
			Mean	Medi...	Mean	Medi...
All Events	14,651	####	17,454	1,352	861	81
P1	10,859	74.1	17,137	1,915	886	136
P2	10,178	93.7	16,781	1,819	869	131
P3	10,000	98.3	16,761	1,799	841	129
P4	103	1.0	117	120	672	536
P5	4,778	47.8	29,091	9,678	1,731	624
P6	7,192	71.9	23,268	5,695	1,145	294
P7	4,389	43.9	31,592	12,151	1,847	667
P8	6,021	60.2	25,996	7,144	1,392	440

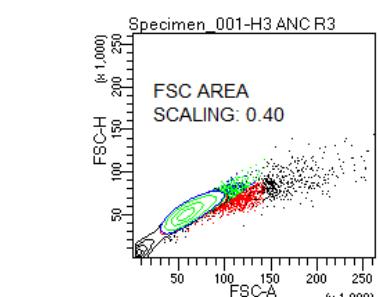
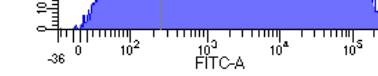
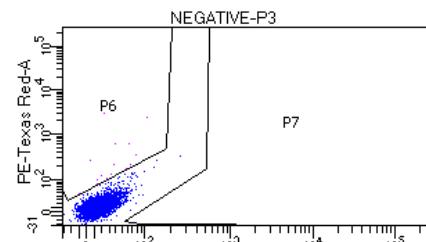
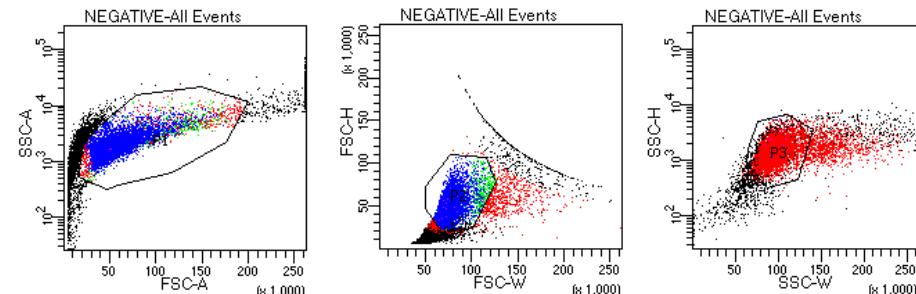


Figure 2 Flow Sorting  
Controls  
N2a cells  
SCN9a sites 1 and 2

# N2A negative control

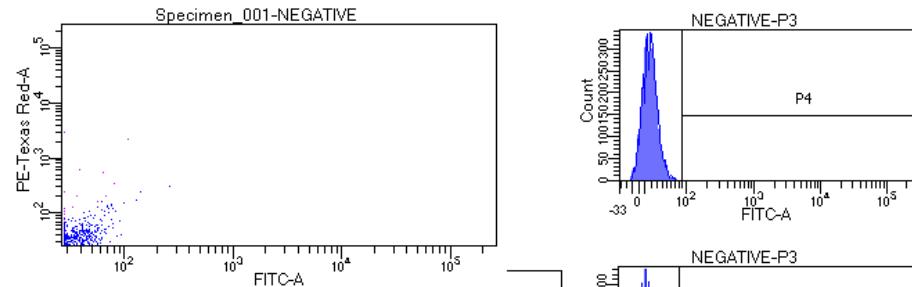
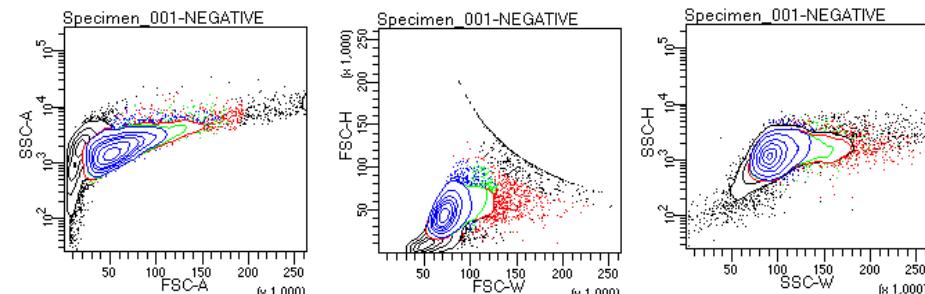
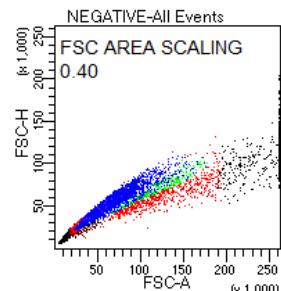
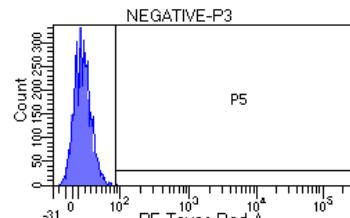


Experiment Name: 042418\_N2A  
 Specimen Name: Specimen\_001  
 Tube Name: NEGATIVE  
 Record Date: Apr 24, 2018 11:17:02 AM  
 SOP: LukeKoblan  
 GUID: b7d02261-40fb-49e0-8168-c67f...

Population	#Events	%Parent	FITC-A Mean	FITC-A Median	PE-Tex... Mean	PE-Tex... Median
All Events	9,023	####	20	13	22	13
P1	6,324	70.1	17	15	18	13
P2	5,556	87.9	15	14	16	12
P3	5,149	92.7	14	13	15	12
P4	7	0.1	125	104	491	182
P5	45	0.9	59	57	273	125
P6	15	0.3	36	31	566	208
P7	0	0.0	####	####	####	####

Tube: NEGATIVE

Population	#Events	%Parent	%Total
All Events	9,023	####	100.0
P1	6,324	70.1	70.1
P2	5,556	87.9	61.6
P3	5,149	92.7	57.1
P4	7	0.1	0.1
P5	45	0.9	0.5
P6	15	0.3	0.2
P7	0	0.0	0.0

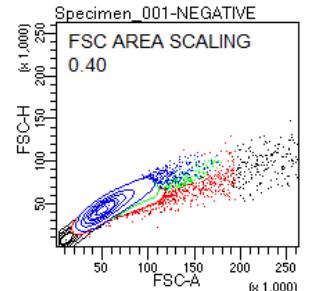
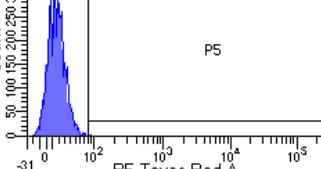
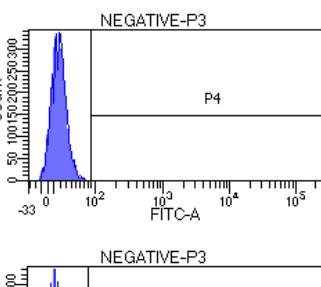
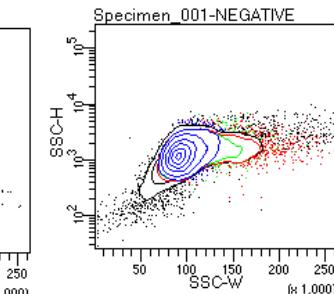


Specimen Name: Specimen\_001  
 Tube Name: NEGATIVE  
 Record Date: Apr 24, 2018 11:17:02 AM  
 SOP: LukeKoblan  
 GUID: b7d02261-40fb-49e0-8168-c67f...

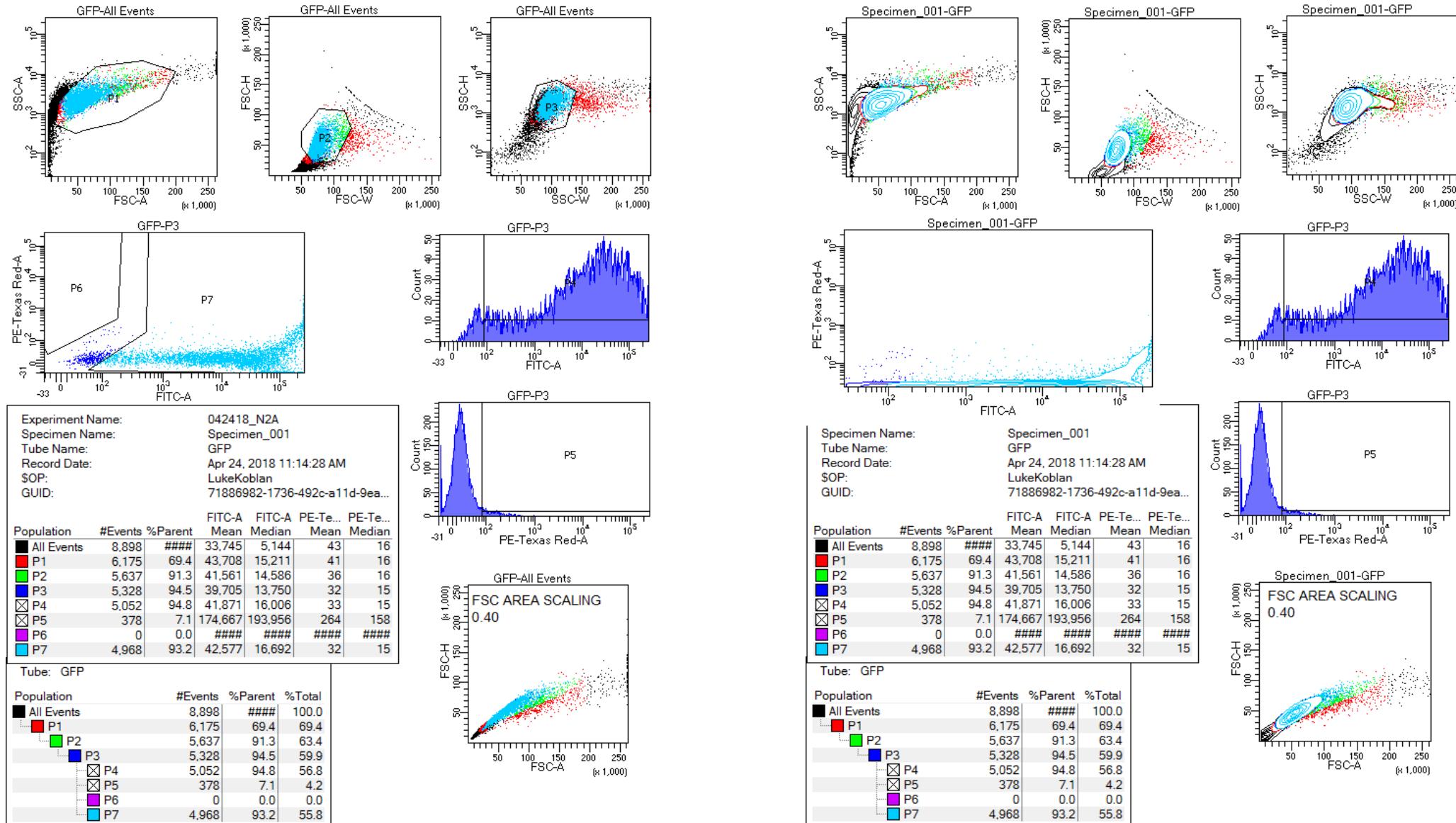
Population	#Events	%Parent	FITC-A Mean	FITC-A Median	PE-Tex... Mean	PE-Tex... Median
All Events	9,023	####	20	13	22	13
P1	6,324	70.1	17	15	18	13
P2	5,556	87.9	15	14	16	12
P3	5,149	92.7	14	13	15	12
P4	7	0.1	125	104	491	182
P5	45	0.9	59	57	273	125
P6	15	0.3	36	31	566	208
P7	0	0.0	####	####	####	####

Tube: NEGATIVE

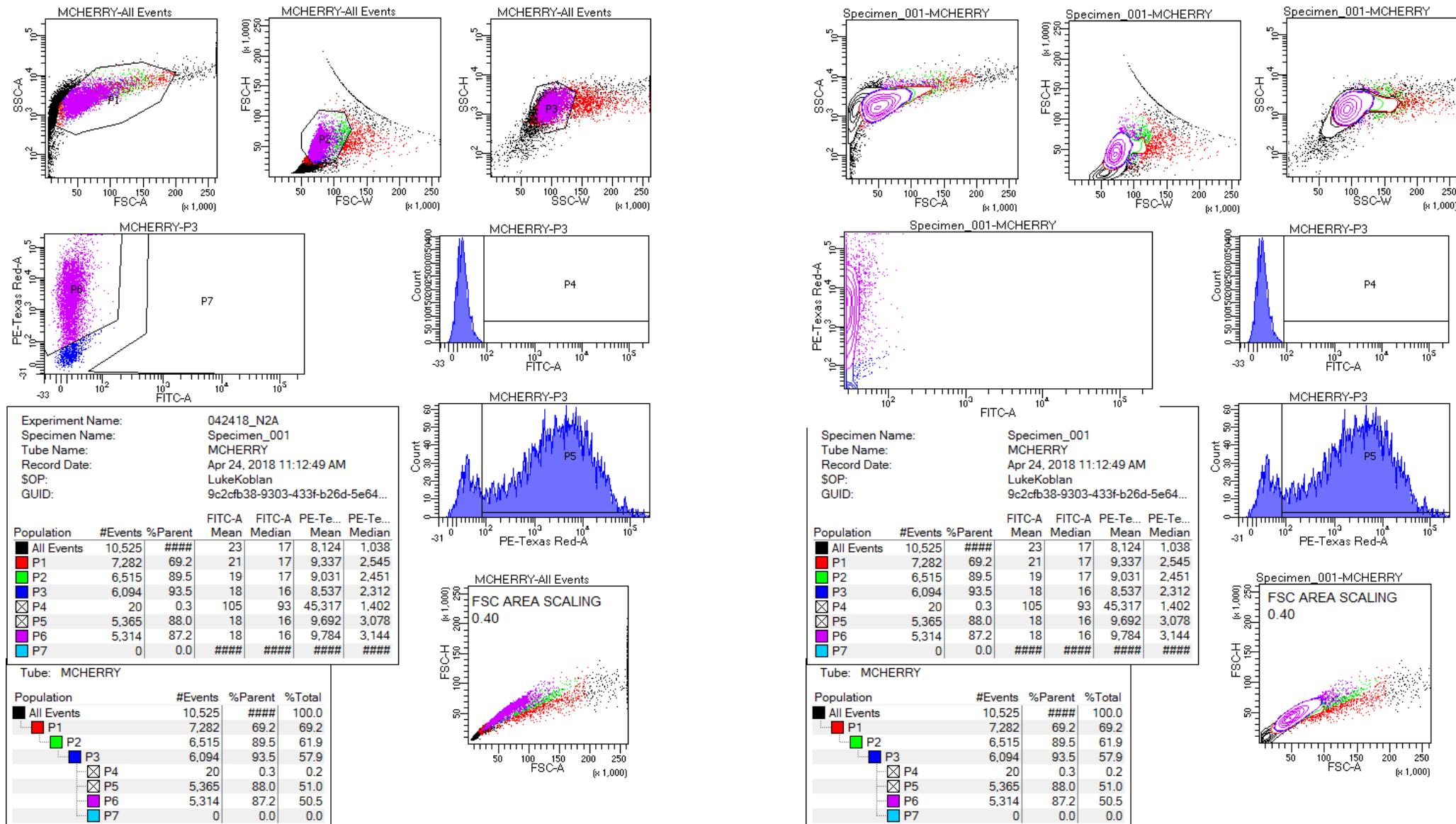
Population	#Events	%Parent	%Total
All Events	9,023	####	100.0
P1	6,324	70.1	70.1
P2	5,556	87.9	61.6
P3	5,149	92.7	57.1
P4	7	0.1	0.1
P5	45	0.9	0.5
P6	15	0.3	0.2
P7	0	0.0	0.0



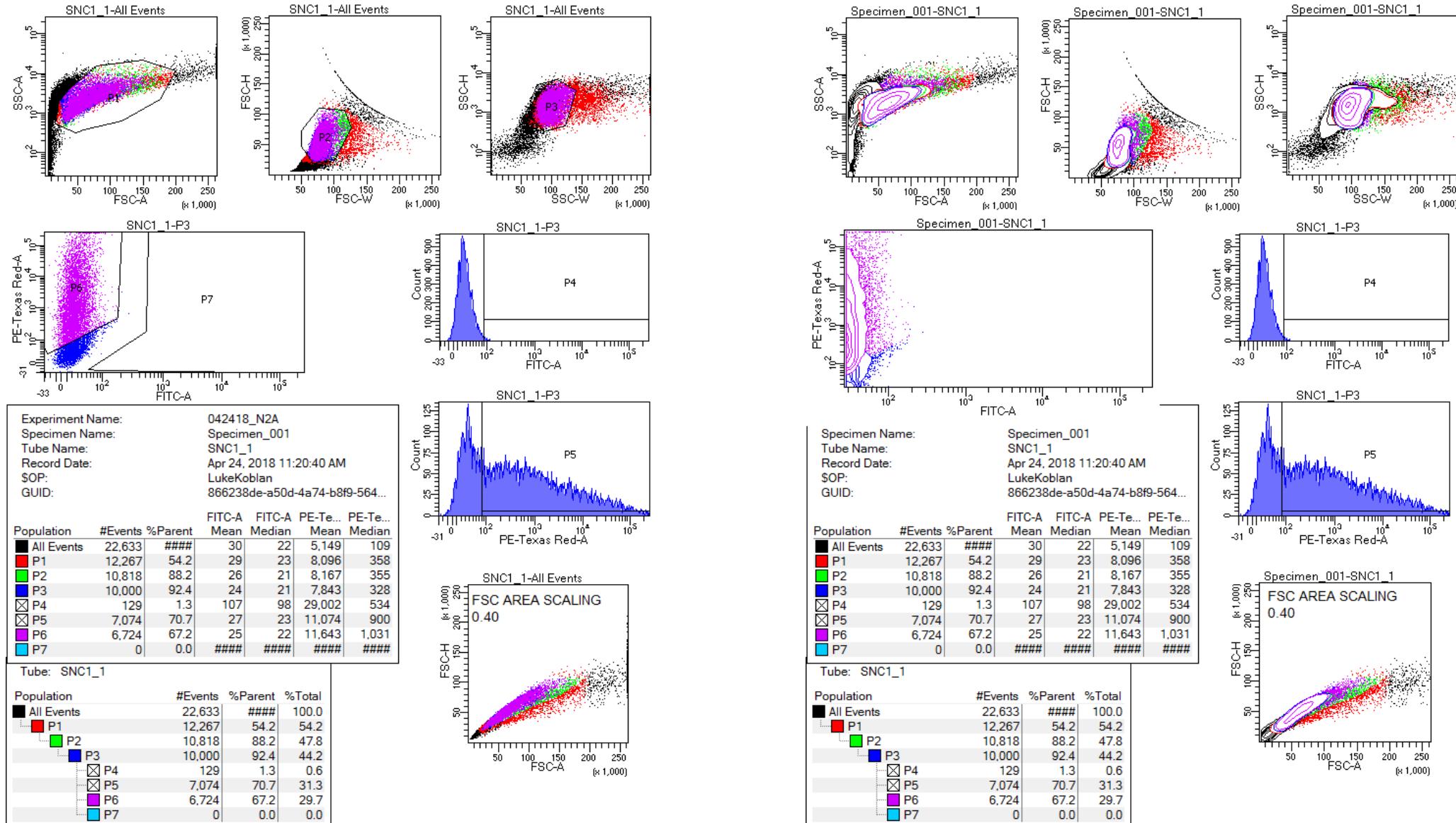
# N2A GFP+ control



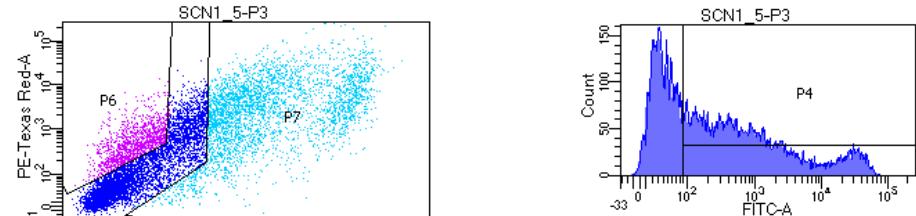
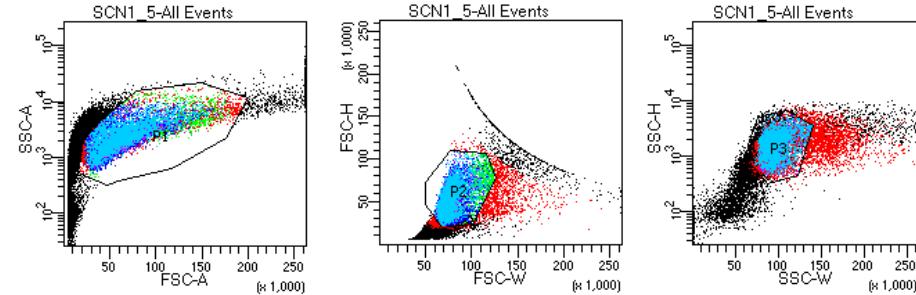
# N2A mCherry+ control



# Example N2A BE4 mCherry In trans sort



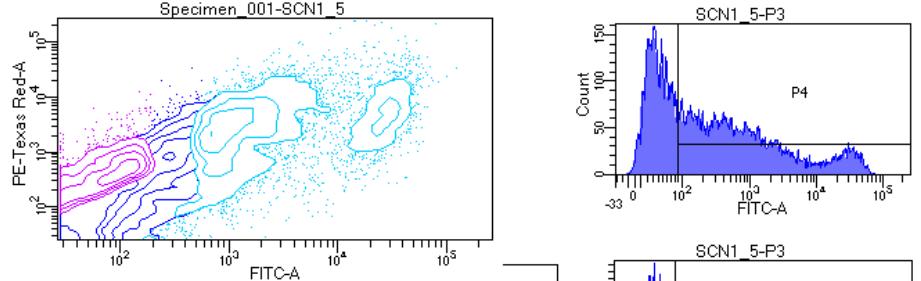
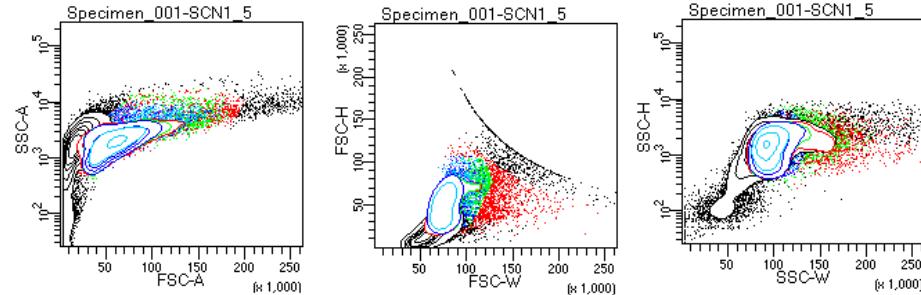
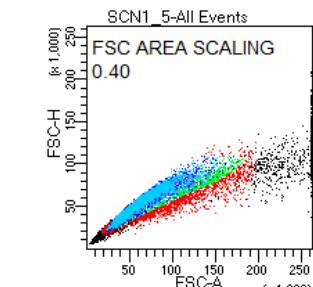
# Example N2A P2A sort (BE4max-P2A-GFP)



Experiment Name:		042418_N2A				
Specimen Name:		Specimen_001				
Tube Name:		SCN1_5				
Record Date:		Apr 24, 2018 11:35:55 AM				
SOP:		LukeKoblan				
GUID:		c2e8ea6f-4747-49aa-a7f8-fa43...				
Population	#Events	%Parent	FITC-A Mean	FITC-A Median	PE-Tex... Mean	PE-Tex... Median
All Events	23,250	####	1,863	61	1,998	102
P1	12,300	52.9	3,024	190	3,074	368
P2	10,825	88.0	3,024	173	3,072	361
P3	10,000	92.4	2,981	159	2,976	338
P4	6,078	60.8	4,883	605	4,815	1,231
P5	6,972	69.7	4,249	421	4,255	914
P6	1,314	13.1	80	71	731	471
P7	3,422	34.2	8,495	2,004	7,730	2,982

Tube: SCN1\_5

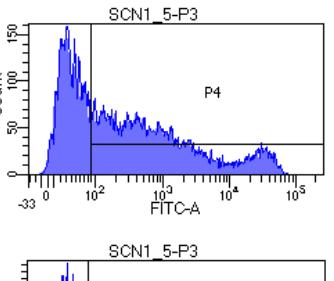
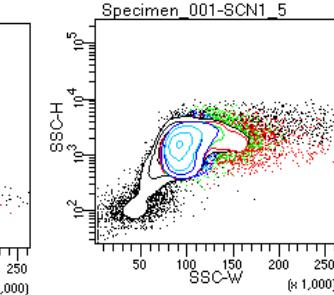
Population	#Events	%Parent	%Total
All Events	23,250	####	100.0
P1	12,300	52.9	52.9
P2	10,825	88.0	46.6
P3	10,000	92.4	43.0
P4	6,078	60.8	26.1
P5	6,972	69.7	30.0
P6	1,314	13.1	5.7
P7	3,422	34.2	14.7



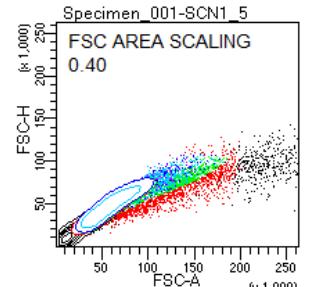
Specimen Name:		Specimen_001				
Tube Name:		SCN1_5				
Record Date:		Apr 24, 2018 11:35:55 AM				
SOP:		LukeKoblan				
GUID:		c2e8ea6f-4747-49aa-a7f8-fa43...				
Population	#Events	%Parent	FITC-A Mean	FITC-A Median	PE-Tex... Mean	PE-Tex... Median
All Events	23,250	####	1,863	61	1,998	102
P1	12,300	52.9	3,024	190	3,074	368
P2	10,825	88.0	3,024	173	3,072	361
P3	10,000	92.4	2,981	159	2,976	338
P4	6,078	60.8	4,883	605	4,815	1,231
P5	6,972	69.7	4,249	421	4,255	914
P6	1,314	13.1	80	71	731	471
P7	3,422	34.2	8,495	2,004	7,730	2,982

Tube: SCN1\_5

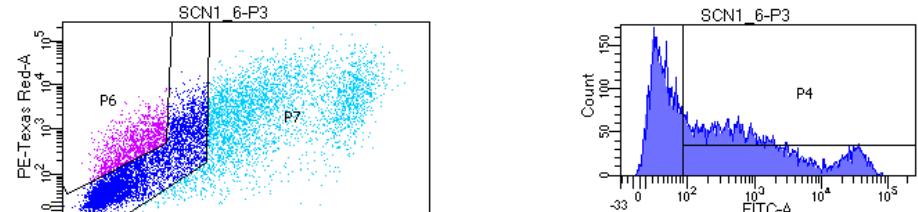
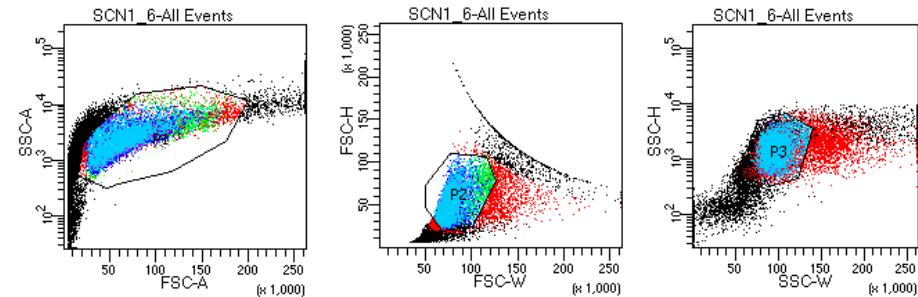
Population	#Events	%Parent	%Total
All Events	23,250	####	100.0
P1	12,300	52.9	52.9
P2	10,825	88.0	46.6
P3	10,000	92.4	43.0
P4	6,078	60.8	26.1
P5	6,972	69.7	30.0
P6	1,314	13.1	5.7
P7	3,422	34.2	14.7



Specimen Name:		Specimen_001				
Tube Name:		SCN1_5				
Record Date:		Apr 24, 2018 11:35:55 AM				
SOP:		LukeKoblan				
GUID:		c2e8ea6f-4747-49aa-a7f8-fa43...				
Population	#Events	%Parent	FITC-A Mean	FITC-A Median	PE-Tex... Mean	PE-Tex... Median
All Events	23,250	####	1,863	61	1,998	102
P1	12,300	52.9	3,024	190	3,074	368
P2	10,825	88.0	3,024	173	3,072	361
P3	10,000	92.4	2,981	159	2,976	338
P4	6,078	60.8	4,883	605	4,815	1,231
P5	6,972	69.7	4,249	421	4,255	914
P6	1,314	13.1	80	71	731	471
P7	3,422	34.2	8,495	2,004	7,730	2,982



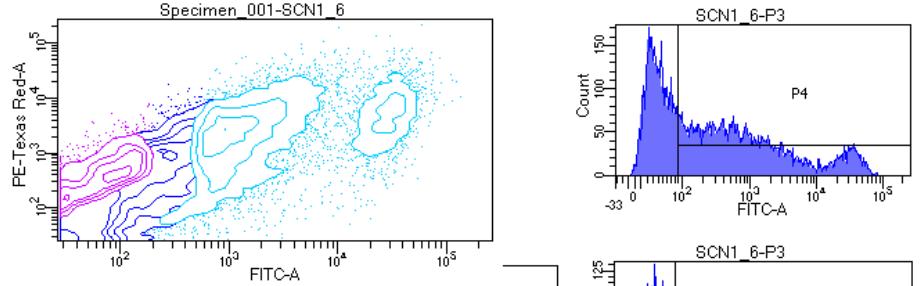
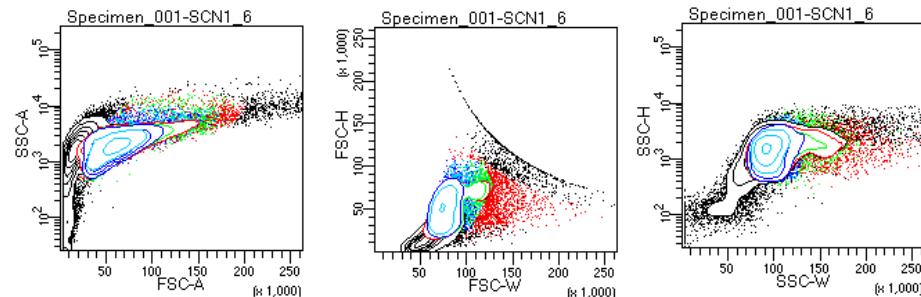
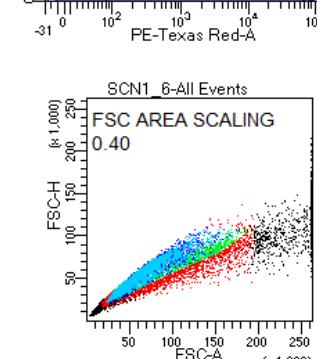
# Example N2A P2A sort (AncBE4max–P2A–GFP)



Experiment Name:		042418_N2A					
Specimen Name:		Specimen_001					
Tube Name:		SCN1_6					
Record Date:		Apr 24, 2018 11:39:58 AM					
SOP:		LukeKoblan					
GUID:		18a49be5-f22f-4cd1-9365-8e2b...					
Population	#Events	%Parent	FITC-A Mean	FITC-A Median	PE-Tex... Mean	PE-Tex... Median	
All Events	22,763	####	2,340	69	2,046	108	
P1	12,514	55.0	3,545	212	2,877	363	
P2	10,919	87.3	3,555	190	2,873	357	
P3	10,000	91.6	3,516	177	2,755	325	
P4	6,103	61.0	5,738	677	4,439	1,208	
P5	6,912	69.1	5,043	481	3,972	921	
P6	1,213	12.1	78	70	696	464	
P7	3,589	35.9	9,594	2,136	6,839	2,690	

Tube: SCN1\_6

Population	#Events	%Parent	%Total
All Events	22,763	####	100.0
P1	12,514	55.0	55.0
P2	10,919	87.3	48.0
P3	10,000	91.6	43.9
P4	6,103	61.0	26.8
P5	6,912	69.1	30.4
P6	1,213	12.1	5.3
P7	3,589	35.9	15.8



Specimen Name: Specimen\_001

Tube Name: SCN1\_6

Record Date: Apr 24, 2018 11:39:58 AM

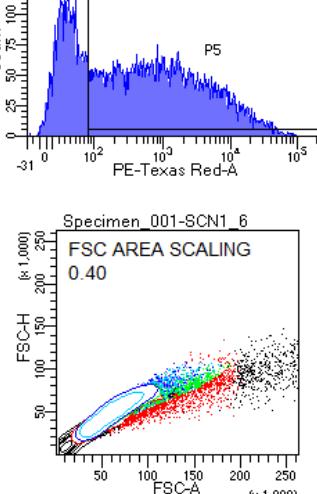
SOP: LukeKoblan

GUID: 18a49be5-f22f-4cd1-9365-8e2b...

Population	#Events	%Parent	FITC-A Mean	FITC-A Median	PE-Tex... Mean	PE-Tex... Median	
All Events	22,763	####	2,340	69	2,046	108	
P1	12,514	55.0	3,545	212	2,877	363	
P2	10,919	87.3	3,555	190	2,873	357	
P3	10,000	91.6	3,516	177	2,755	325	
P4	6,103	61.0	5,738	677	4,439	1,208	
P5	6,912	69.1	5,043	481	3,972	921	
P6	1,213	12.1	78	70	696	464	
P7	3,589	35.9	9,594	2,136	6,839	2,690	

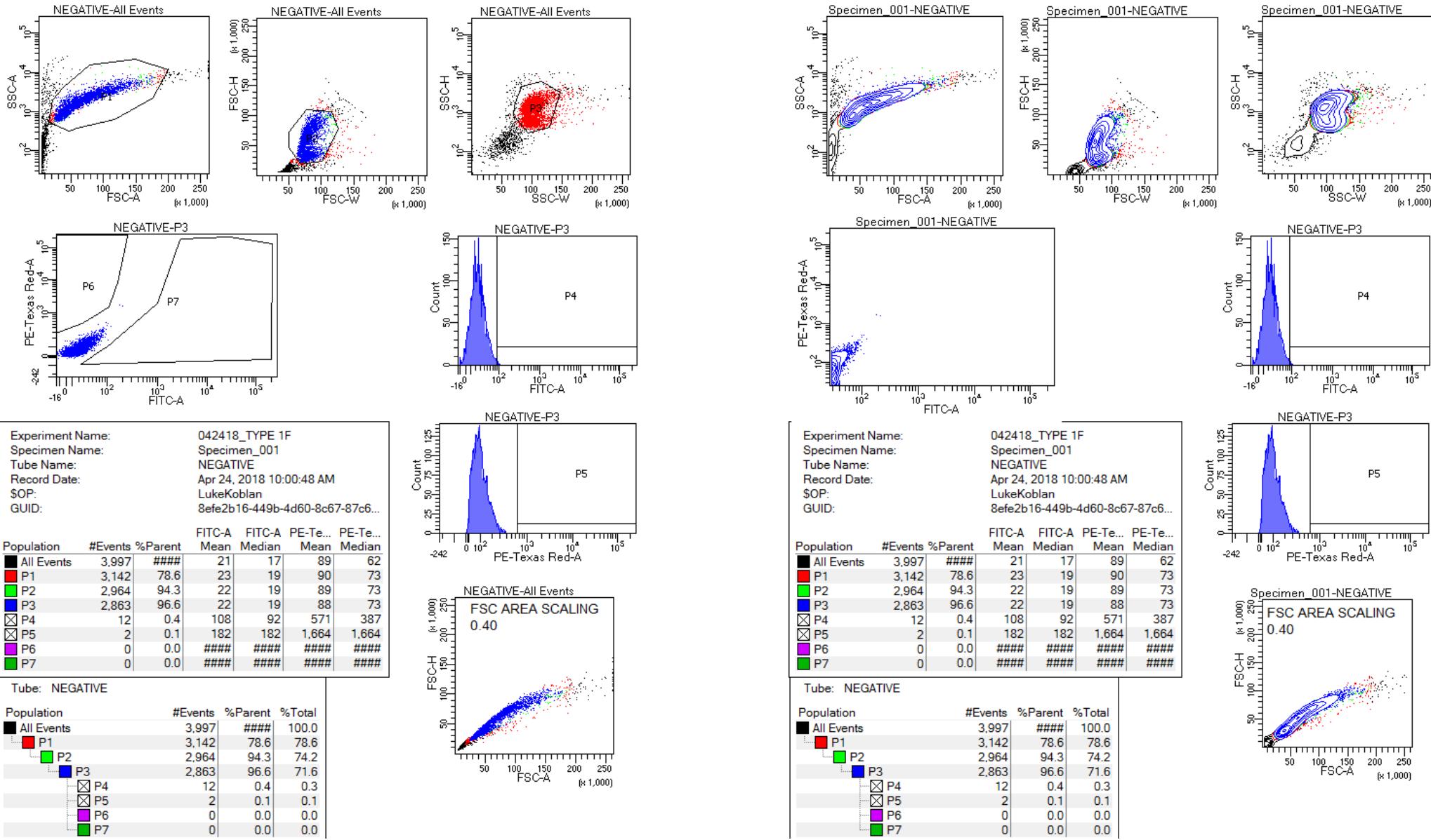
Tube: SCN1\_6

Population	#Events	%Parent	%Total
All Events	22,763	####	100.0
P1	12,514	55.0	55.0
P2	10,919	87.3	48.0
P3	10,000	91.6	43.9
P4	6,103	61.0	26.8
P5	6,912	69.1	30.4
P6	1,213	12.1	5.3
P7	3,589	35.9	15.8

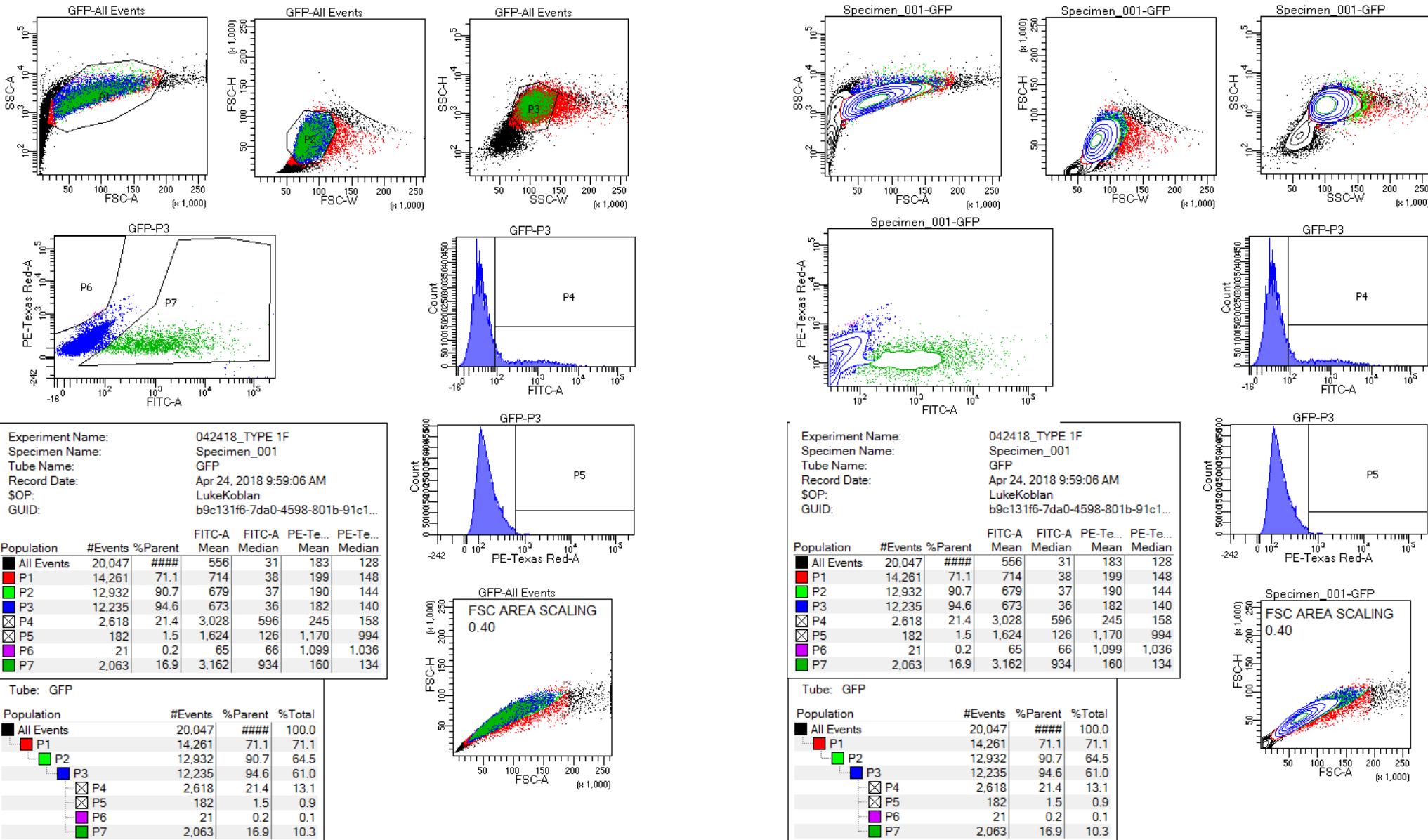


# Figure 2 Flow Sorting CGD Type 1F Fibroblasts Controls

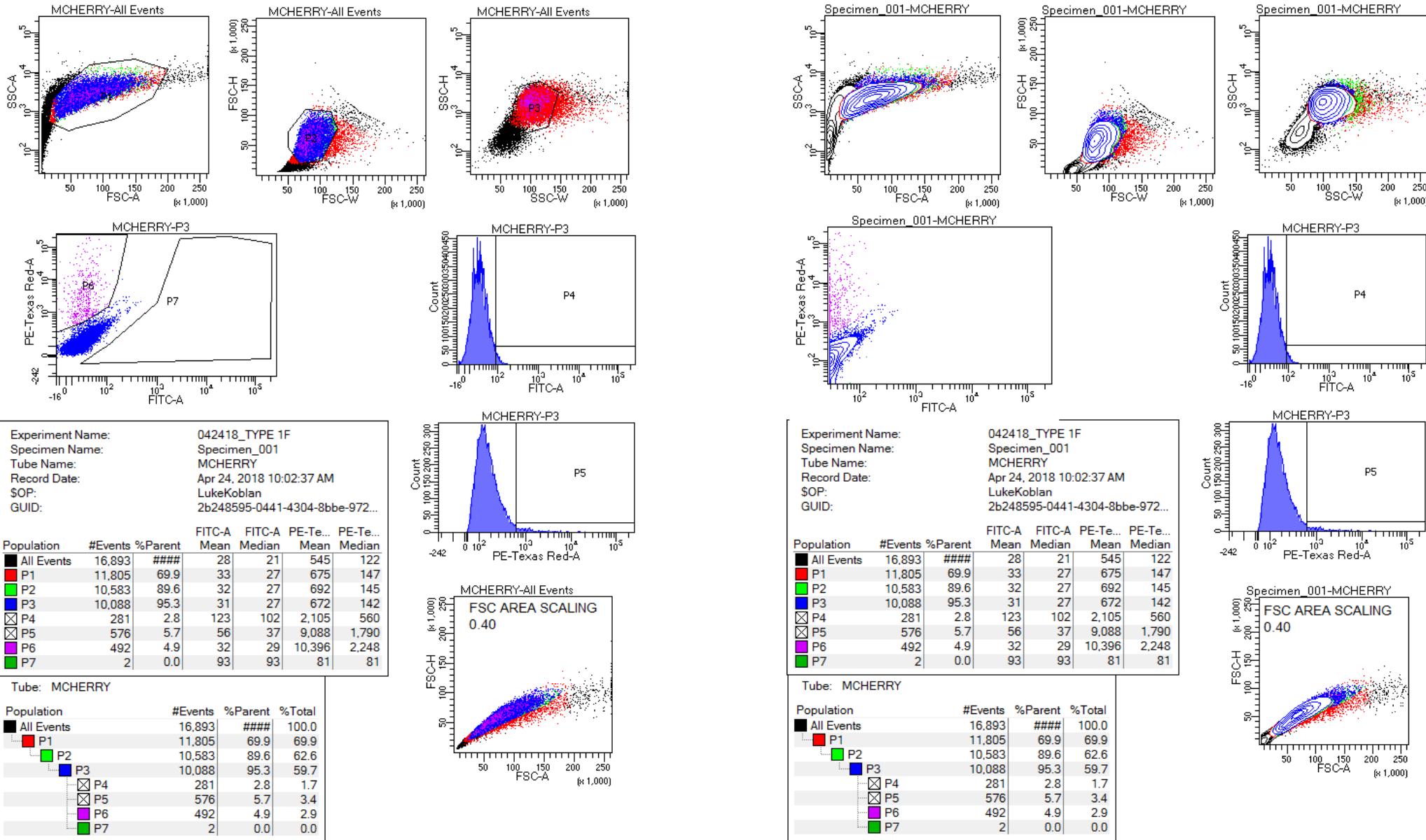
# Fibroblast negative control



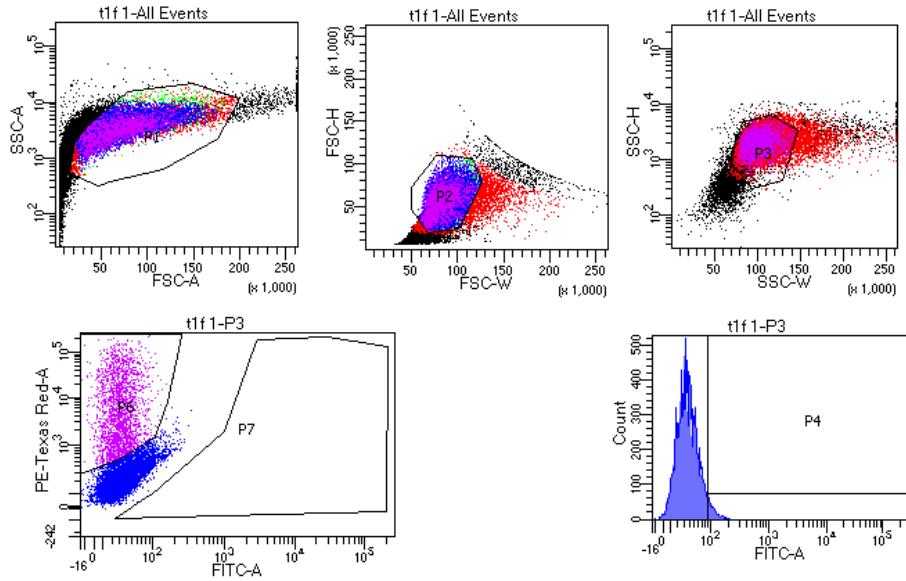
# Fibroblast GFP+ control



# Fibroblast mCherry+ control

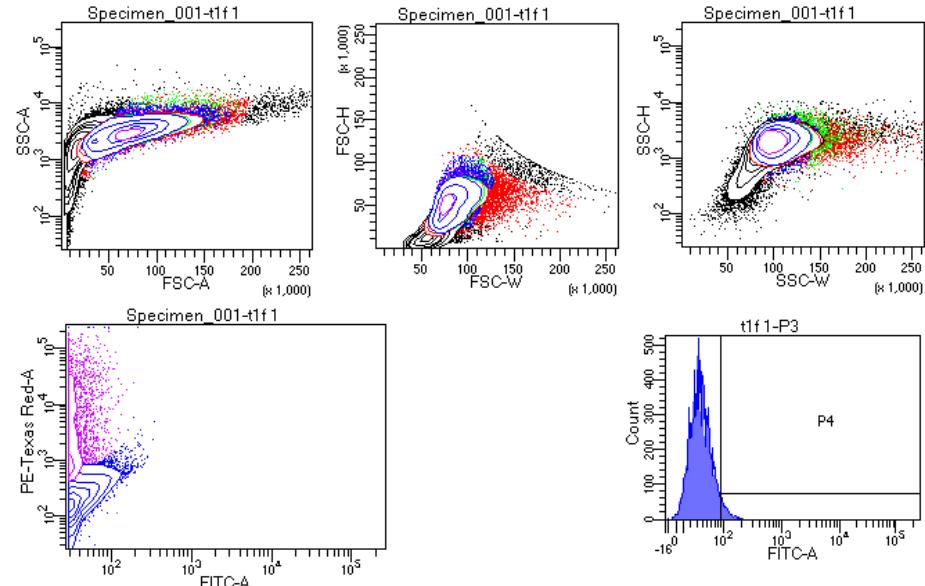
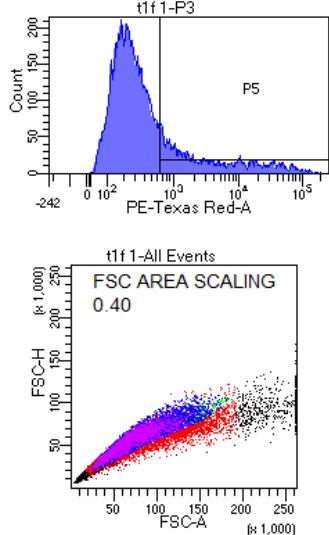


# Example Fibroblast In trans sort (BE4)



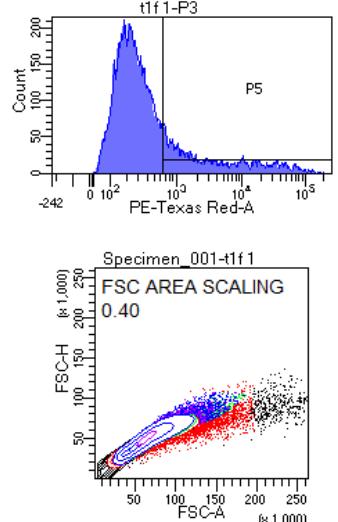
Experiment Name:	042418_TYPE 1F					
Specimen Name:	Specimen_001					
Tube Name:	t1f1					
Record Date:	Apr 24, 2018 10:14:38 AM					
SOP:	LukeKoblan					
GUID:	1504f8a4-f3d2-4fa8-a681-c5da9...					
Population	#Events	%Parent	FITC-A Mean	FITC-A Median	PE-Tex... Mean	PE-Tex... Median
All Events	25,986	####	33	23	2,349	225
P1	13,263	51.0	40	31	3,967	288
P2	10,832	81.7	38	31	4,232	290
P3	10,254	94.7	36	31	4,264	279
P4	481	4.7	118	105	3,937	661
P5	2,573	25.1	42	31	16,263	3,245
P6	2,335	22.8	30	27	16,460	4,094
P7	1	0.0	107	107	114	114

Tube: t1f1			
Population	#Events	%Parent	%Total
All Events	25,986	####	100.0
P1	13,263	51.0	51.0
P2	10,832	81.7	41.7
P3	10,254	94.7	39.5
P4	481	4.7	1.9
P5	2,573	25.1	9.9
P6	2,335	22.8	9.0
P7	1	0.0	0.0

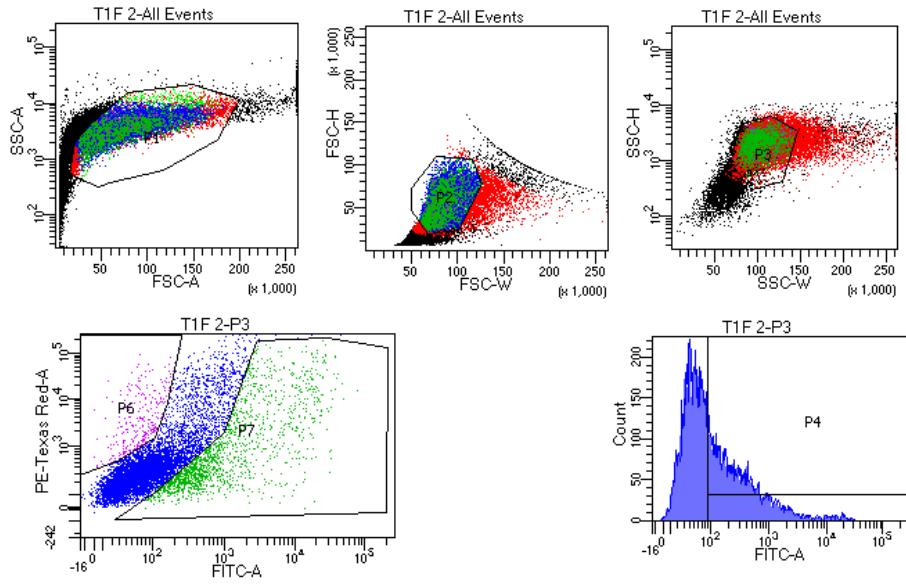


Experiment Name:	042418_TYPE 1F					
Specimen Name:	Specimen_001					
Tube Name:	t1f1					
Record Date:	Apr 24, 2018 10:14:38 AM					
SOP:	LukeKoblan					
GUID:	1504f8a4-f3d2-4fa8-a681-c5da9...					
Population	#Events	%Parent	FITC-A Mean	FITC-A Median	PE-Tex... Mean	PE-Tex... Median
All Events	25,986	####	33	23	2,349	225
P1	13,263	51.0	40	31	3,967	288
P2	10,832	81.7	38	31	4,232	290
P3	10,254	94.7	36	31	4,264	279
P4	481	4.7	118	105	3,937	661
P5	2,573	25.1	42	31	16,263	3,245
P6	2,335	22.8	30	27	16,460	4,094
P7	1	0.0	107	107	114	114

Tube: t1f1			
Population	#Events	%Parent	%Total
All Events	25,986	####	100.0
P1	13,263	51.0	51.0
P2	10,832	81.7	41.7
P3	10,254	94.7	39.5
P4	481	4.7	1.9
P5	2,573	25.1	9.9
P6	2,335	22.8	9.0
P7	1	0.0	0.0



# Example Fibroblast P2A sort (BE4max-P2A-GFP)

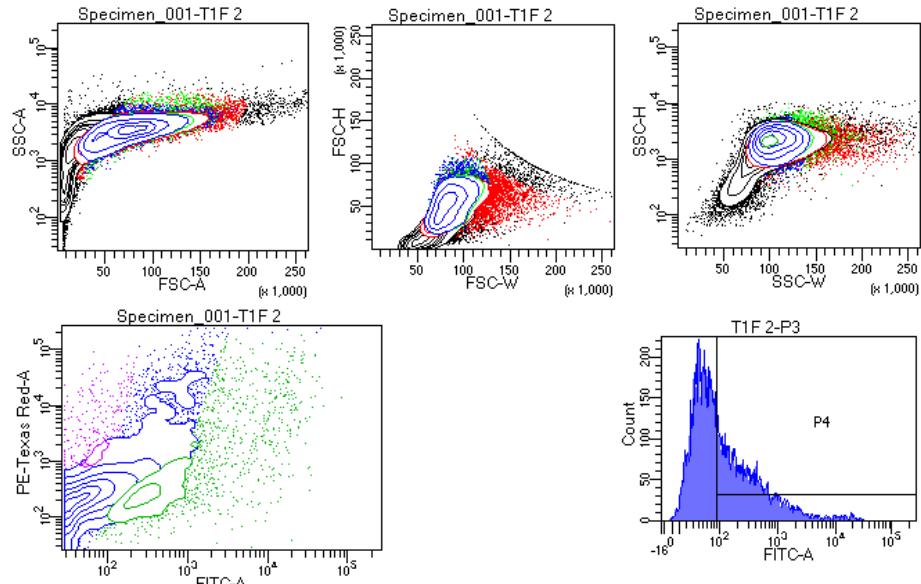
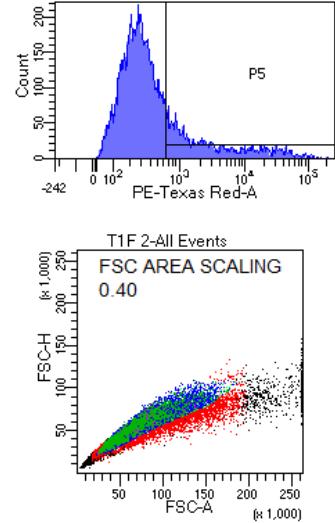


Experiment Name: 042418\_TYPE 1F  
 Specimen Name: Specimen\_001  
 Tube Name: T1F 2  
 Record Date: Apr 24, 2018 10:28:32 AM  
 SOP: LukeKoblan  
 GUID: a442668b-eb11-4746-8efa-94ef...

Population	#Events	%Parent	FITC-A Mean	FITC-A Median	PE-Tex... Mean	PE-Tex... Median
All Events	25,164	####	387	50	2,113	249
P1	13,300	52.9	599	79	3,426	322
P2	10,717	80.6	626	77	3,674	318
P3	10,000	93.3	631	74	3,659	307
P4	4,574	45.7	1,328	261	7,453	631
P5	2,536	25.4	1,998	396	13,653	2,542
P6	313	3.1	73	66	8,662	2,580
P7	1,568	15.7	3,200	628	6,679	409

Tube: T1F 2

Population	#Events	%Parent	%Total
All Events	25,164	####	100.0
P1	13,300	52.9	52.9
P2	10,717	80.6	42.6
P3	10,000	93.3	39.7
P4	4,574	45.7	18.2
P5	2,536	25.4	10.1
P6	313	3.1	1.2
P7	1,568	15.7	6.2



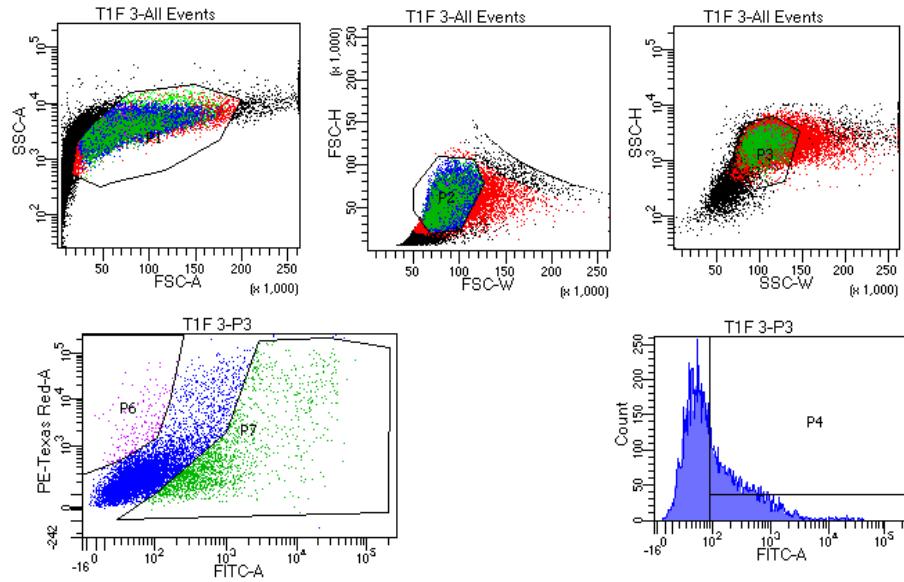
Experiment Name: 042418\_TYPE 1F  
 Specimen Name: Specimen\_001  
 Tube Name: T1F 2  
 Record Date: Apr 24, 2018 10:28:32 AM  
 SOP: LukeKoblan  
 GUID: a442668b-eb11-4746-8efa-94ef...

Population	#Events	%Parent	FITC-A Mean	FITC-A Median	PE-Tex... Mean	PE-Tex... Median
All Events	25,164	####	387	50	2,113	249
P1	13,300	52.9	599	79	3,426	322
P2	10,717	80.6	626	77	3,674	318
P3	10,000	93.3	631	74	3,659	307
P4	4,574	45.7	1,328	261	7,453	631
P5	2,536	25.4	1,998	396	13,653	2,542
P6	313	3.1	73	66	8,662	2,580
P7	1,568	15.7	3,200	628	6,679	409

Tube: T1F 2

Population	#Events	%Parent	%Total
All Events	25,164	####	100.0
P1	13,300	52.9	52.9
P2	10,717	80.6	42.6
P3	10,000	93.3	39.7
P4	4,574	45.7	18.2
P5	2,536	25.4	10.1
P6	313	3.1	1.2
P7	1,568	15.7	6.2

# Example Fibroblast P2A sort (AncBE4max-P2A-GFP)

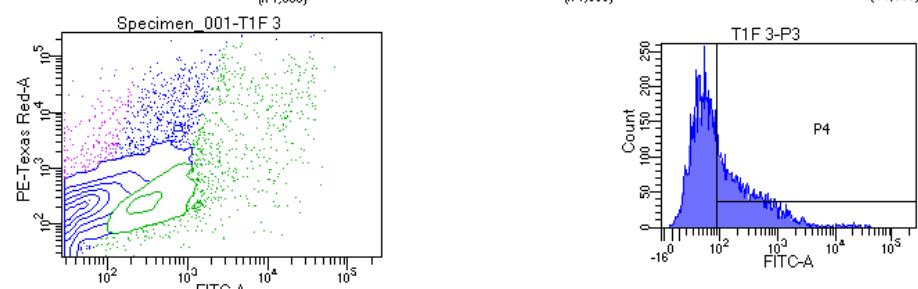
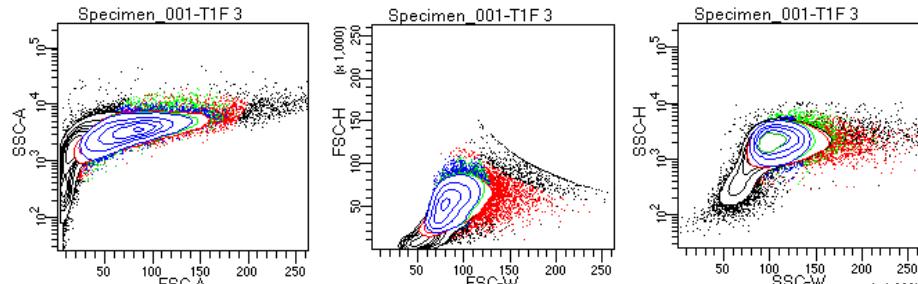
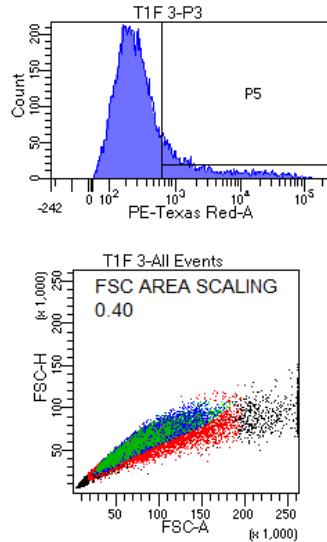


Experiment Name:	042418_TYPE 1F
Specimen Name:	Specimen_001
Tube Name:	T1F 3
Record Date:	Apr 24, 2018 10:34:59 AM
SOP:	LukeKoblan
GUID:	64ceca8f-c1d0-4b69-9cec-dd09...

Population	#Events	%Parent	FITC-A Mean	FITC-A Median	PE-Tex... Mean	PE-Tex... Median
All Events	23,227	####	400	49	1,650	229
P1	13,269	57.1	588	73	2,420	278
P2	10,754	81.0	607	72	2,519	277
P3	10,000	93.0	613	69	2,478	269
P4	4,349	43.5	1,355	256	5,280	488
P5	1,958	19.6	2,398	451	11,637	2,112
P6	215	2.2	70	64	6,328	2,442
P7	1,820	18.2	2,761	545	5,453	330

Tube: T1F 3			
Population	#Events	%Parent	%Total
All Events	23,227	####	100.0
P1	13,269	57.1	57.1
P2	10,754	81.0	46.3
P3	10,000	93.0	43.1
P4	4,349	43.5	18.7
P5	1,958	19.6	8.4
P6	215	2.2	0.9
P7	1,820	18.2	7.8



Experiment Name:	042418_TYPE 1F
Specimen Name:	Specimen_001
Tube Name:	T1F 3
Record Date:	Apr 24, 2018 10:34:59 AM
SOP:	LukeKoblan
GUID:	64ceca8f-c1d0-4b69-9cec-dd09...

Population	#Events	%Parent	FITC-A Mean	FITC-A Median	PE-Tex... Mean	PE-Tex... Median
All Events	23,227	####	400	49	1,650	229
P1	13,269	57.1	588	73	2,420	278
P2	10,754	81.0	607	72	2,519	277
P3	10,000	93.0	613	69	2,478	269
P4	4,349	43.5	1,355	256	5,280	488
P5	1,958	19.6	2,398	451	11,637	2,112
P6	215	2.2	70	64	6,328	2,442
P7	1,820	18.2	2,761	545	5,453	330

Tube: T1F 3			
Population	#Events	%Parent	%Total
All Events	23,227	####	100.0
P1	13,269	57.1	57.1
P2	10,754	81.0	46.3
P3	10,000	93.0	43.1
P4	4,349	43.5	18.7
P5	1,958	19.6	8.4
P6	215	2.2	0.9
P7	1,820	18.2	7.8

