Symphony A6

Flow Cytometry & Single Cell Analysis
https://fcsc.ku.dk/

Secondary Flourochrome (Bright Antigen)

Primary Flourochrome (Dim Antigen)	BUV395	BUV496	BUV563	BUV615	BUV661	BUV737	BUV805	BV421	BV480	BV510	BV570	BV605	BV650	BV711	BV750	BV786	FITC	AF 488	BB515	BB630	RB613	BB660	PerCP-Cy5.5	BB700	RB705	RB744	RB780	PE	PE-CF594	RY610	PE-Cy5	PE-Cy7	APC	AF 647	AF 700	APC-R700	APC-Cy7	APC-Fire 750	APC-eFluor 780
BUV395	174	42%	49%	38%	42%	36%	42%	0%	3%	20%	8%	11%	9%	15%	12%	18%	46%	31%	18%	16%	29%	16%	12%	20%	22%	24%	24%	21%	16%	33%	21%	30%	24%	48%	39%	33%	26%	33%	32%
BUV496	47%	76	16%	18%	22%	35%	24%	28%	49%	28%	13%	17%	19%	29%	19%	21%	41%	22%	55%	21%	1%	24%	19%	6%	31%	28%	27%	24%	25%	4%	28%	34%	26%	22%	43%	9%	33%	11%	36%
BUV563	20%	58%	252	58%	15%	14%	11%	17%	40%	31%	73%	55%	11%	9%	9%	12%	23%	9%	26%	49%	20%	27%	9%	18%	15%	14%	11%	81%	23%	14%	22%	21%	11%	11%	26%	2%	18%	2%	20%
BUV615	15%	52%	83%	385	57%	16%	10%	13%	34%	32%	65%	80%	38%	9%	7%	10%	20%	15%	19%	99%	83%	35%	7%	27%	10%	10%	5%	61%	63%	46%	20%	16%	16%	16%	15%	10%	12%	12%	13%
BUV661	32%	34%	67%	84%	461	24%	8%	6%	17%	17%	50%	72%	75%	40%	6%	10%	13%	1%	8%	73%	62%	91%	48%	67%	44%	5%	0%	39%	40%	22%	89%	13%	87%	18%	17%	35%	32%	8%	30%
BUV737	27%	22%	53%	79%	90%	490	27%	3%	10%	18%	35%	64%	64%	86%	77%	57%	11%	7%	4%	64%	52%	75%	55%	80%	91%	89%	43%	25%	30%	19%	74%	46%	68%	26%	51%	87%	35%	25%	29%
BUV805	21%	18%	39%	74%	89%	95%	518	5%	6%	13%	24%	56%	52%	82%	81%	90%	9%	6%	3%	52%	35%	68%	49%	76%	84%	86%	89%	17%	23%	16%	66%	87%	58%	20%	39%	74%	80%	81%	81%
BV421	21%	16%	25%	27%	31%	22%	17%	456	33%	41%	67%	61%	52%	60%	46%	71%	40%	51%	30%	48%	44%	52%	35%	53%	40%	35%	36%	54%	38%	47%	53%	45%	40%	59%	52%	51%	44%	51%	46%
BV480	25%	39%	15%	5%	22%	32%	11%	28%	55		23%	26%	29%	37%	27%	32%	50%	53%	34%	31%	38%	35%	32%	41%	42%	38%	39%	38%	38%	43%	41%	51%	40%	62%	58%	50%	47%	52%	52%
BV510	25%	39%	15%	5%	22%	32%	11%	28%		10	23%	26%	29%	38%	27%	32%	49%	53%	34%	30%	38%	35%	32%	41%	42%	38%	39%	38%	38%	43%	41%	51%	40%	62%	57%	51%	46%	53%	52%
BV570	14%	25%	48%	42%	9%	11%	1%	18%	49%	33%	61	67%	18%	16%	13%	17%	30%	2%	17%	61%	23%	32%	13%	20%	17%	17%	13%	68%	28%	8%	28%	29%	21%	2%	34%	0%	24%	0%	27%
BV605	6%	25%	53%	78%	29%	5%	3%	15%	50%	31%	74%	110	44%	15%	6%	10%	15%	1%	21%	85%	62%	51%	13%	36%	10%	7%	0%	69%	57%	23%	41%	13%	20%	3%	13%	3%	12%	1%	12%
BV650	17%	9%	17%	60%	77%	58%	0%	0%	23%	23%	62%	78%	723	97%	58%	45%	17%	9%	0%	76%	64%	83%	67%	84%	74%	38%	0%	38%	41%	28%	78%	17%	65%	23%	28%	68%	33%	17%	17%
BV711	14%	12%	26%	62%	78%	8%	1%	8%	29%	26%	64%	79%	83%	233	8%	18%	4%	7%	8%	79%	65%	86%	60%	79%	49%	6%	0%	45%	48%	34%	85%	10%	69%	11%	15%	35%	17%	8%	20%
BV750	16%	9%	11%	49%	70%	79%	52%	7%	19%	22%	52%	74%	75%	88%	225	90%	9%	9%	5%	69%	41%	79%	62%	83%	76%	79%	66%	25%	29%	17%	71%	75%	59%	10%	39%	67%	61%	57%	58%
BV786	15%	4%	8%	41%	65%	77%	79%	8%	15%	19%	44%	70%	69%	87%	89%	444	11%	8%	3%	63%	31%	74%	58%	81%	75%	76%	81%	19%	24%	13%	66%	87%	50%	13%	33%	62%	75%	77%	77%
FITC	11%	15%	31%	0%	3%	14%	0%	5%	10%	22%	8%	7%	14%	18%	10%	13%	33			19%	20%	22%	14%	27%	23%	23%	28%	23%	18%	21%	22%	30%	20%	50%	39%	30%	27%	34%	27%
Alexa Fluor 488	11%	15%	31%	0%	3%	14%	0%	5%	10%	22%	8%	7%	14%	18%	10%	13%		81		19%	20%	22%	14%	27%	23%	23%	28%	23%	18%	21%	22%	30%	20%	50%	39%	30%	27%	33%	27%
BB515	11%	15%	31%	0%	3%	14%	0%	5%	10%	22%	8%	7%	14%	18%	10%	13%			256	19%	20%	22%	14%	27%	23%	23%	28%	23%	18%	21%	22%	30%	20%	50%	39%	30%	27%	33%	27%
BB630	19%	19%	66%	90%	29%	20%	7%	8%	9%	0%	52%	69%	24%	24%	17%	21%	44%	29%	47%	284		49%	19%	32%	29%	27%	29%	78%	77%	54%	42%	39%	29%	31%	43%	12%	32%	14%	39%
RB613	19%	19%	66%	90%	29%	20%	7%	8%	9%	0%	52%	69%	24%	24%	17%	21%	44%	29%	47%		290	49%	19%	32%	29%	27%	29%	78%	77%	54%	42%	39%	29%	31%	43%	12%	32%	14%	39%
BB660	13%	9%	55%	76%	83%	17%	5%	6%	9%	26%	45%	64%	53%	27%	8%	8%	29%	39%	34%	85%	88%	377	61%	86%	71%	20%	14%	71%	77%	76%	95%	25%	79%	53%	17%	53%	36%	31%	30%
PerCP-Cy5.5	13%	8%	44%	58%	63%	78%	5%	2%	6%	29%	33%	55%	45%	75%	44%	29%	46%	39%	28%	84%	87%	89%	39			85%	66%	65%	72%	67%	91%	70%	41%	39%	25%	67%	44%	36%	21%
BB700	13%	8%	44%	58%	63%	78%	5%	2%	6%	29%	33%	55%	44%	75%	44%	29%	46%	39%	28%	84%	87%	89%		421		85%	66%	65%	72%	67%	91%	70%	42%	39%	25%	67%	44%	36%	21%
RB705	13%	8%	44%	58%	63%	78%	5%	2%	6%	29%	33%	55%	44%	76%	44%	29%	46%	39%	28%	84%	87%	89%			919	85%	66%	65%	72%	67%	91%	70%	42%	39%	25%	67%	44%	36%	21%
RB744	13%	7%	34%	50%	69%	91%	26%	4%	6%	9%	25%	45%	32%	78%	78%	66%	14%	17%	22%	80%	79%	86%	69%	90%	93%	691	91%	55%	67%	52%	90%	92%	40%	17%	29%	66%	40%	37%	38%
RB780	12%	6%	31%	56%	70%	85%	65%	5%	5%	7%	25%	46%	30%	75%	72%	79%	14%	13%	17%	76%	73%	84%	67%	88%	93%	93%	818	50%	66%	55%	91%	97%	59%	32%	31%	68%	75%	73%	75%
PE	12%	29%	89%	80%	14%	11%	8%	9%	23%	29%	82%	76%	12%	10%	11%	11%	18%	28%	14%	73%	63%	18%	9%	23%	11%	13%	6%	291	72%	76%	59%	46%	12%	31%	16%	22%	14%	24%	14%
PE-CF594	13%	42%	81%	96%	55%	18%	9%	9%	18%	15%	71%	86%	38%	13%	9%	13%	21%	5%	21%	94%	87%	31%	13%	13%	14%	15%	10%	83%	175		44%	34%	19%	3%	22%	1%	19%	1%	21%
RY610	13%	42%	81%	96%	55%	18%	9%	9%	18%	15%	71%	86%	38%	13%	9%	13%	21%	5%	21%	94%	87%	31%	13%	13%	14%	15%	10%	83%		161	44%	34%	19%	3%	22%	1%	19%	1%	21%
PE-Cy5	9%	1%	50%	80%	86%	6%	0%	0%	1%	7%	47%	68%	61%	27%	1%	4%	15%	5%	4%	74%	68%	82%	49%	57%	41%	4%	0%	67%	75%	76%	739	19%	83%	55%	15%	52%	40%	16%	34%
PE-Cy7	14%	0%	30%	74%	84%	75%	65%	0%	0%	4%	30%	59%	48%	72%	56%	71%	9%	2%	0%	56%	47%	68%	57%	72%	68%	61%	63%	50%	70%	66%	94%	1300	76%	53%	46%	80%	86%	85%	86%
APC	23%	22%	58%	79%	96%	31%	9%	6%	11%	12%	36%	61%	76%	48%	11%	18%	22%	13%	21%	77%	75%	94%	57%	82%	69%	16%	11%	52%	59%	42%	95%	20%	218		27%	68%	58%	26%	53%
Alexa Fluor 647	23%	22%	58%	78%	96%	31%	9%	6%	11%	12%	36%	61%	76%	48%	11%	18%	22%	13%	21%	77%	75%	94%	57%	82%	69%	16%	11%	52%	59%	42%	95%	20%		80	27%	68%	58%	27%	53%
Alexa Fluor 700	20%	10%	18%	58%	89%	94%	10%	5%	15%	21%	52%	72%	77%	93%	73%	43%	10%	11%	5%	70%	53%	87%	64%	91%	92%	82%	17%	28%	33%	21%	85%	29%	83%	77%	42		56%	43%	52%
APC-R700	20%	10%	18%	58%	89%	93%	10%	5%	15%	21%	52%	72%	77%	93%	72%	43%	10%	11%	5%	70%	53%	87%	64%	91%	92%	82%	17%	28%	32%	21%	85%	29%	83%	77%		325	56%	43%	52%
APC-Cy7	16%	4%	6%	25%	85%	89%	86%	2%	2%	1%	4%	14%	46%	83%	83%	92%	3%	1%	1%	15%	14%	79%	49%	81%	84%	81%	76%	2%	7%	1%	78%	85%	78%	68%	63%	85%	289		
APC-Fire 750	4%	4%	6%	25%	85%	89%	86%	2%	2%	1%	4%	14%	46%	83%	83%	92%	3%	1%	1%	15%	14%	79%	49%	81%	84%	81%	76%	2%	7%	1%	78%	85%	78%	68%	63%	85%		263	
APC-eFluor 780	6%	6%	6%	25%	85%	89%	86%	2%	2%	1%	4%	14%	46%	83%	83%	92%	3%	1%	1%	15%	14%	79%	49%	81%	84%	81%	76%	2%	7%	1%	78%	85%	78%	68%	63%	85%			270

How the matrix was made
Mouse spleens was stained with individual anti-CD8 labeled antibodies with the indicated flourochrome and analyzed on the indicated instrument.
Each calculated value was arbitrarily assigned a color code according to the legend to show where the biggest spreading was situated.

How to use the resolution impact matrix
You find the color of interest on the top of the matrix, go down till you find the channel that you need to combine the color with and read the impact of spreading.

Consider this for panel design
When you are designing larger panels the task of making correct combinations becomes more difficult, but using the list below can help you:

- The lineage markers such as CD4, CD19 etc. should be found on the top of the matrix.
- Make sure the lineage marker has as many green cells as possible.
- For an important marker you should find the color on the left of the matrix.
- Make sure the marker has as many green cells as possible when you move across the matrix.
- Notice that spreading occurs between different laser lines.

Amount of spreading (%)

0-20
20-40
40-60
60-80
80-100
NA

Relative fluorochrome brightness (AU)

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