

Sample Preparation Guide

		Excitation Laser (nm)										
Ch	Band (nm)	375***	405	488	561	592	642	730	785	Used	Ch	
1	435-480 (457/45)	375 & 405*** Ch1/Ch9 BF or *DAPI, BV421, AF350, Hoechst, PB	BRIGHTFIELD									1
2	480-560 (528/65)	*BV510, PacOrange, QD525,		FITC, AF488, GFP, YFP, DyLight488, PKH67, Syto13, SpectrumGreen, LysoTrackerGreen, MitoTrackerGreen,							2	
3	560-595 (577/35)	*QD565, QD585, eFluor565		PE, PKH26, Cy3, DSRed, CellMask/CellTracker/SY TOX Orange	PE, AF546, DyLight550, PKH26, DSRed, Cy3, SpectmOrange						3	
4	595-642 (610/30)	Ch4/Ch10 BF or *QD625, eFluor625, BV605		Ch4/Ch10 BF or PE- TexRed*, ECD*, PE- AF610*, RFP, QD625*, eFluor625*	Ch4/Ch10 BF or AF568*, DyLight594*, PE-TxRed*, ECD*, PE- AF610*, RFP, mCherry*						4	
5	642-745 (702/85)	*QD705, eFluor700, BV711		PE-Cy5*, PE-AF647*, 7AAD*, PI* PerCP*, PerCP-Cy5.5*, eFluor650*, FuraRedlo, Draq5*, LDS751*,	PE-Cy5*, PE- AF647*, 7AAD*, Draq5*, LDS751*,						5	
6	745-785 (765/40)	*QD800, BV786		PE-Cy7*, PE-AF750*,	PE-Cy7*, PE- AF750*,				SSC		6	
7	435-505 (457/45)	375 No 405*** *DAPI, BV421, AF405, Hoechst, PacBlue, CascadeBlue, eFluor450, DyLight405, CFP, LIVE/DEAD Violet AF350									7	
8	505-570 (537/65)	*BV510, PacOrange, CascadeYellow, AF430,	*BV510, PacOrange, CascadeYellow, AF430, eFluor525, QD525								8	
9	570-595 (582/25)	Ch1/Ch9 BF or *QD565, QD585	Ch1/Ch9 BF or *QD565, QD585, eFluor565	BRIGHTFIELD								9
10	595-642 (610/30)	Ch4/Ch10 BF or *QD625, eFluor625, BV605	Ch4/Ch10 BF or *QD625, eFluor625, BV605		Ch4/Ch10 BF or TexRed*, AF594*, DyLight594*, mCherry*						10	
11	642-745 (702/85)	*QD705, eFluor700, BV711	*QD705, eFluor700, BV711		APC, AF647, AF660, Cy5, DyLight649, DRAQ5*	AF647, AF660, AF680, APC, Cy5, DyLight649, DyLight680, Draq5* PE- AF647*, PE-Cy5*, PerCP*, PerCP-Cy5.5*					11	
12	745-785 (765/40)	*QD800, BV786	*QD800, BV786		APC-Cy7, APC-AF750, APC-H7, APC- eFluor750	APC-Cy7, APC-AF750, APC-H7, APC- eFluor750, Cy7, AF750, DyLight750, PE-Cy7*, PE-AF750*	AF750, Cy7, DyLight750	SSC			12	

Recommended dyes (based on optimal excitation and detection channels) are in boldface.

*Many dyes will excite by more than one laser, and this can increase cross camera compensation.

**Channel bandpass may change depending on which lasers are on. Values listed are assuming 405,488, and 642 excitation.

***375 laser is aligned to Ch1 if the system also has a 405 laser, if not its aligned to Ch7. In cases where Ch1 is used for 375 excited dyes brightfield should be placed in Ch4 and Ch10.

1 laser (488): ideal dyes are AF488, PE, PE-TxRed, PE-Cy5, PE Cy7, SSC-Ch12,

2 laser (488,642): ideal dyes are AF488, PE, PE-TxRed, SSC-Ch6, and AF647, APC Cy7

3 laser (405,488,642): ideal dyes are AF488, PE, PE-TxRed, SSC-Ch6, and DAPI (or BV421), AF647, APC Cy7