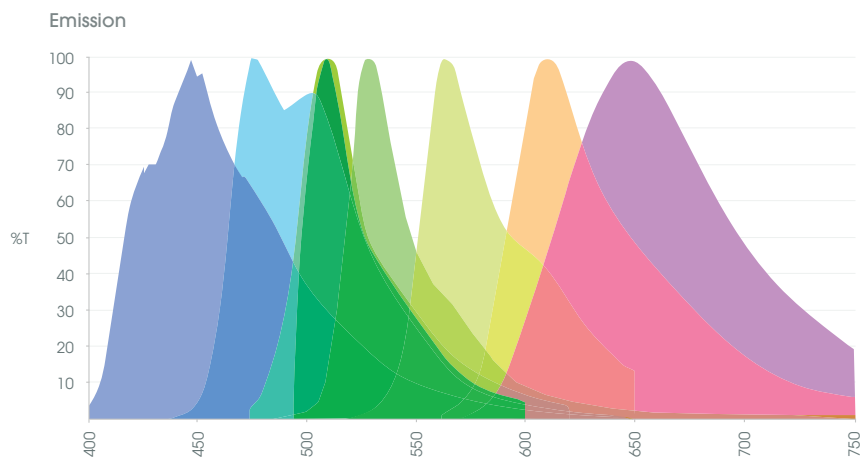
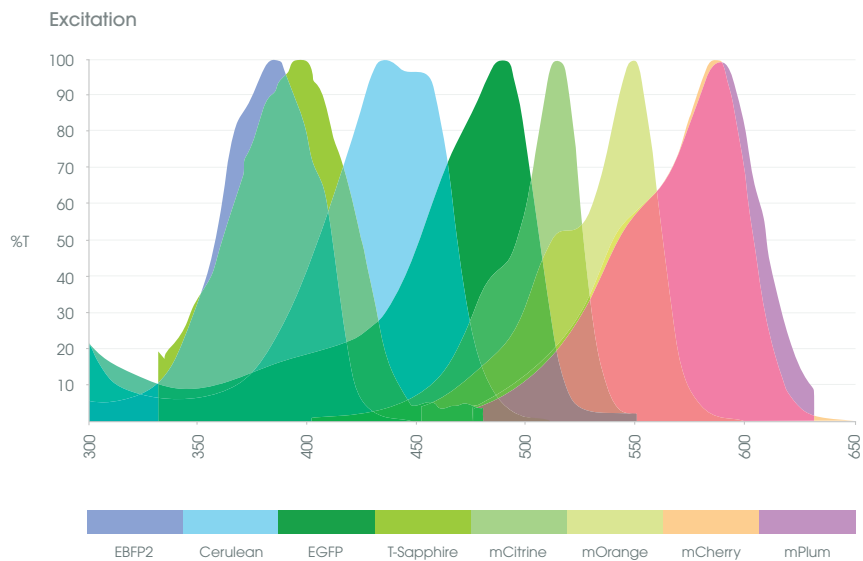


# Fluorescent proteins reference card

abcam

## Excitation and emission spectra

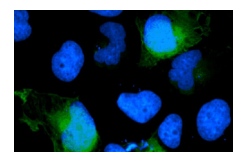


## Fluorescent protein characteristics

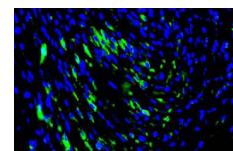
Class	Protein	$\lambda_{ex}$ (nm)	$\lambda_{em}$ (nm)	Extinction coefficient	Quantum Yield	Relative brightness (% of EGFP)	pKa	Bleaching $t_{1/2}$ (s)
Blue	EBFP2	383	448	32,000	0.56	53	4.5	55
Cyan	Cerulean	433	475	43,000	0.62	79	4.7	36
Green	EGFP	488	507	56,000	0.60	100	6.0	174
UV-excitable green	T-Sapphire	399	511	44,000	0.60	79	4.9	25
Yellow	mCitrine	516	529	77,000	0.76	174	5.6	49
Orange	mOrange	548	562	71,000	0.69	146	6.5	9
Red	mCherry	587	610	72,000	0.22	47	<4.5	96
Far red	mPlum	590	649	41,000	0.10	12	<4.5	53

## Antibodies

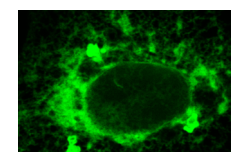
Enhance your fluorescent protein signal



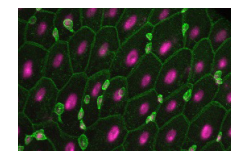
Anti-GFP antibody - ChIP Grade (ab290)  
Human HEK 293 cells transfected with CACNA1D-GFP



Anti-mCherry antibody (1C51) (ab125096)  
Rat smooth muscle cells in bladder.



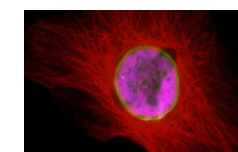
Anti-GFP antibody (EPR14104) (ab183734)  
BHK cells were transfected with GFP-Sec61 beta.



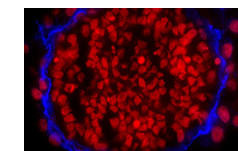
Anti-GFP antibody (ab13970)  
*Drosophila melanogaster* tissue: adult posterior midgut.

## Fluorescent dyes

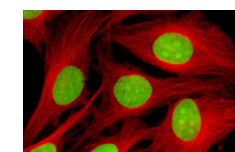
Combine fluorescent proteins with fluorescent dyes



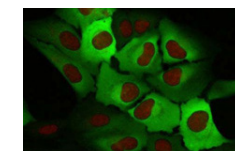
DRAQ5™ (ab108410)  
Nuclear stain for live and fixed cells. No photobleaching effect.



DRAQ7™ (ab109202)  
Nuclear stain for dead and permeabilized cells.



Nuclear Green DCS1 (ab138905)  
DNA selective dye for dead/fixed or apoptotic cells.



CYTRAK Orange™ (ab109203)  
Nuclear and cytoplasmic staining for live and fixed cells.