

Chromeo Dye advantages

- Enhanced photostability gives you more time for image capture
- pH-insensitive fluorescence is ideal for biological assays
- Strong absorbance & emission properties result in brighter fluorescence
- Available in different formats

Dye	Absorption (nm)	Emission (nm)	ϵ L/(mol-cm)	Stokes Shift (nm)
Chromeo™ 488	488	517	73,000	29
Chromeo™ 494	494	628	55,000	124
Chromeo™ 546	545	561	98,800	16
Chromeo™ 642	642	660	180,000	18

Fluorescent properties of Chromeo 488

Chromeo 488 is the best choice to replace traditional green-emitting fluorophores.

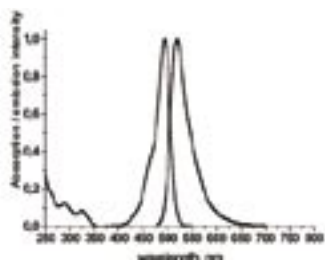


Figure 1: Spectrum of Chromeo 488 in PBS.

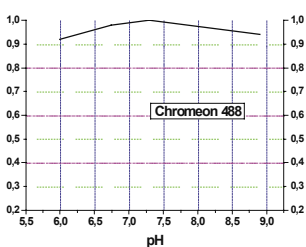


Figure 2: Chromeo 488 stability over a range of pH.



Figure 3: Lamin staining in HeLa cells. Lamin primary antibody detected by Chromeo 488 Goat anti-Mouse IgG.

Product	Format	Catalog No.
Chromeo™ 488 Carboxylic Acid	1 mg	15510
	5 mg	16510
Chromeo™ 488 NHS-Ester	1 mg	15511
	5 mg	16511
Chromeo™ 488 Biotin	1 mg	15512
	5 mg	16512

Product	Format	Catalog No.
Chromeo™ 488 Streptavidin	1 mg	15513
	5 mg	16513
Chromeo™ 488 Goat anti-Mouse IgG	1 mg	15031
Chromeo™ 488 Goat anti-Rabbit IgG	1 mg	15041

Chromeo 494

Chromeo 494 is ideal for multiplexing due to its very large Stokes shift of 124 nm.



Figure 4: Tubulin staining in HeLa cells. Tubulin primary antibody detected by Chromeo 494 Goat anti-Rabbit IgG.



Figure 5: Staining of the EGF receptor. EGFR detected by Chromeo 494 Goat anti-Rabbit IgG. Experiment performed at the University of Regensburg, Institut of Pathology/AG Brockhoff.

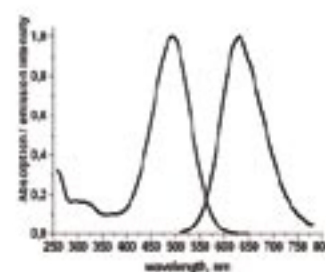


Figure 6: Spectrum of Chromeo 494 in PBS.

Product	Format	Catalog No.
Chromeo™ 494 Carboxylic Acid	1 mg	15110
	5 mg	16110
Chromeo™ 494 NHS-Ester	1 mg	15111
	5 mg	16111
Chromeo™ 494 Biotin	1 mg	15112
	5 mg	16112

Product	Format	Catalog No.
Chromeo™ 494 Streptavidin	1 mg	15113
	5 mg	16113
Chromeo™ 494 Goat anti-Rabbit IgG	1 mg	15042

Chromeo 546

Chromeo 546 shows similar fluorescent properties as the yellow-orange fluorescent Cy3 or TAMRA dyes. It is excitable with mercury-arc lamps or the 543 nm line of the green He-Ne laser. Chromeo 546 and its conjugates are compatible with filters designed for Cy3.

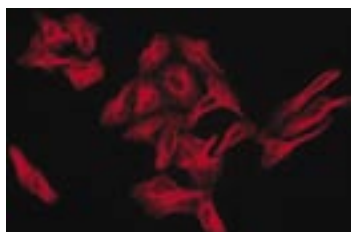


Figure 7: Chromeo 546 streptavidin conjugate detecting anti-tubulin primary antibody and biotin conjugated secondary antibody in U2OS cells.

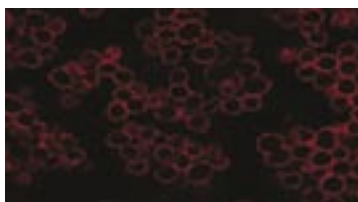


Figure 8: Staining of the EGF receptor by mouse monoclonal antibody and Chromeo 546 Goat anti-Mouse IgG. Experiments performed at the University of Regensburg, Institut of Pathology/AG Brockhoff.

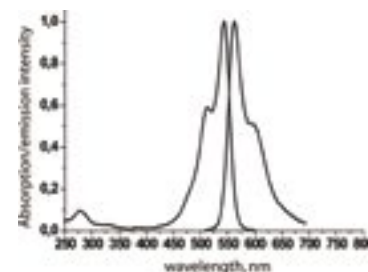


Figure 9: Spectrum of Chromeo 546 in PBS.

Product	Format	Catalog No.
Chromeo™ 546 Carboxylic Acid	1 mg	15210
	5 mg	16210
Chromeo™ 546 NHS-Ester	1 mg	15211
	5 mg	16211
Chromeo™ 546 Biotin	1 mg	15212
	5 mg	16212

Product	Format	Catalog No.
Chromeo™ 546 Streptavidin	1 mg	15213
	5 mg	16213
Chromeo™ 546 Goat anti-Mouse IgG	1 mg	15033
Chromeo™ 546 Goat anti-Rabbit IgG	1 mg	15043

Chromeo 642

Chromeo 642 shows similar fluorescent properties as the red fluorescent Cy5 or allophycocyanin dyes and is excitable with the red Krypton-Argon laser or the 635 nm line of a diode laser.

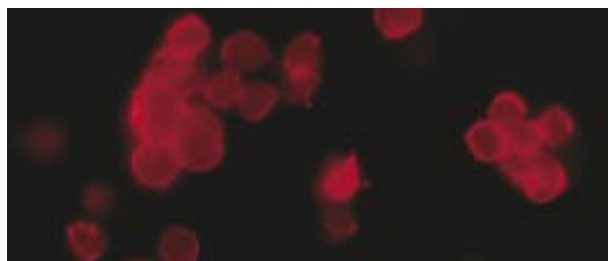


Figure 10: Staining of the EGF receptor on Urotsa cell line which have been paraffin treated. Staining with Chromeo 642 Goat anti-Mouse IgG. Experiments performed at the University of Regensburg, Institut of Pathology/AG Brockhoff.

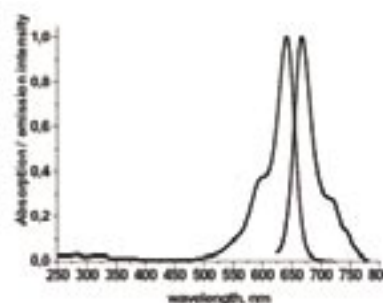


Figure 11: Spectrum of Chromeo 642 in PBS.

Product	Format	Catalog No.
Chromeo™ 642 Carboxylic Acid	1 mg	15310
	5 mg	16310
Chromeo™ 642 NHS-Ester	1 mg	15311
	5 mg	16311
Chromeo™ 642 Biotin	1 mg	15312
	5 mg	16312

Product	Format	Catalog No.
Chromeo™ 642 Streptavidin	1 mg	15313
	5 mg	16313
Chromeo™ 642 Goat anti-Mouse IgG	1 mg	15034
Chromeo™ 642 Goat anti-Rabbit IgG	1 mg	15044