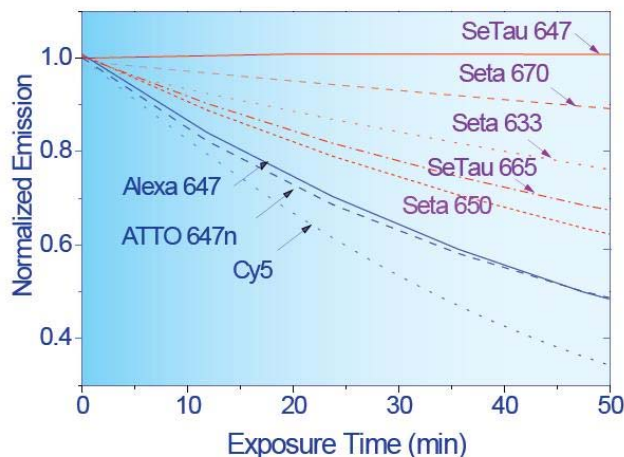


# SETA BioMedicals

Fluorescent Tools for BioMedical Applications

## Photostability Comparison of Seta Labels

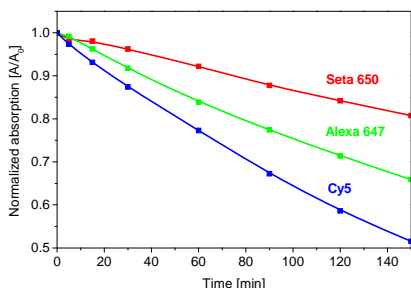
In general Seta dyes exhibit higher photostabilities when compared against other Dyes including Alexa, Cy or ATTO dyes. A comparison of several of our long-wavelength Seta and SeTau dyes with other commercially available dyes is shown below:



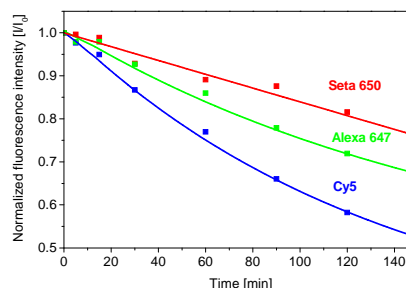
Comparison of photostability of dyes absorbing in the 600 – 700 nm wavelength range. In general Seta and SeTau dyes exhibit higher photostability as compared to Cy5, Alexa or Atto dyes.

### Test Procedure:

Photostability measurements were done with aqueous solutions of the dyes. The optical density of the long-wavelength absorption maximum was controlled to be between 0.09–0.1. Measurements were carried out in standard 1-cm cells. The solutions in standard 1-cm cells with stoppers were placed at a distance of approximately 30-cm from a 500W halogen lamp and irradiated with occasional stirring. The absorption and emission spectra of the solutions were recorded before irradiation and during light exposure. The relative photostabilities were calculated as the ratio between (i) the measured absorbances at the long-wavelength maximum before and after exposure ( $A/A_0$ ) and (ii) relative fluorescence intensities before and after exposure ( $I/I_0$ ), and used to generate the corresponding plots.



Decrease of the relative absorption of **Seta 650** compared to **Cy5** and **Alexa Fluor 647**



Decrease of the relative fluorescence intensity of **Seta 650** compared to **Cy5** and **Alexa Fluor 647**