

## Protocol for Taxol Janelia Fluor® 549 (Cat. No. 6267)

Taxol (often referred to as Paclitaxel) is a diterpenoid that binds to tubulin. It promotes and stabilizes tubulin polymerization, which accounts for its anti-mitotic and cytotoxic action. The conjugation of a fluorescent dye to taxol offers a convenient way to image the microtubule cytoskeleton of a cell; well known fluorescent probes based on this principle are: Flutax 1 (Cat. No. 2226) and Flutax 2 (Cat. No. 6254).

Taxol Janelia Fluor® 549 (Cat. No. 6147) is a tubulin fluorescent probe that incorporates the bright photostable yellow dye, Janelia Fluor® 549. The following protocol provides guidelines for using this product.

### Protocol

- Prepare a stock solution of Taxol Janelia Fluor® 549 in DMSO. *Stock solutions can be aliquoted and stored for up to 1 month at  $\leq -20^{\circ}\text{C}$ .*
- Dilute the stock solution into warm media ( $37^{\circ}\text{C}$ ) and place into a pre-warmed box (for storage in the incubator). *Aqueous working solutions should be prepared and used on the same day.*
- Apply to live cells at a concentration of  $3\ \mu\text{M}$ . *Lower concentrations can be used, and the concentration should be optimized for individual experiments.*
- Incubate for 1 hour at  $37^{\circ}\text{C}$ .
- Rinse the cells three times with 1x PBS and 2% BSA and apply fresh media prior to imaging.
- Image cells using appropriate filters for Taxol Janelia Fluor® 549. Excitation maximum = 556 nm; emission maximum = 575 nm.