

# Thioflavin T \*CAS 2390-54-7\*

Catalog number: 23060

Unit size: 1 g

### **Product Details**

Storage Conditions Freeze (<-15 °C), Minimize light exposure

Expiration Date 12 months upon receiving

### **Chemical Properties**

Appearance Yellow solid

Molecular Weight 318.87

Soluble In DMSO

**Chemical Structure** 

# **Spectral Properties**

Excitation Wavelength 349 nm

Emission Wavelength 454 nm

# **Applications**

Thioflavin T (ThT), also called Basic Yellow 1 or CI 49005, is a benzothiazole salt. The dye is used to visualize plaques composed of beta-amyloid found in the brains of Alzheimer's disease patients. When it binds to beta sheets, such as those in amyloid oligomers, the dye undergoes a characteristic 120 nm red shift of its excitation spectrum that may be selectively excited at 450 nm, resulting in a fluorescence signal at 482 nm. ThT binds rapidly and specifically to the anti-parallel beta-sheet fibrils formed from synthetic beta-amyloid (1-40), but does not bind to monomer or oligomeric intermediates. The binding of ThT does not interfere with the aggregation of beta-amyloid peptide into amyloid fibrils.