For Research Use Only Thioflavin T



www.ptgcn.com

Catalog Number: CM01652

产品信息

Catalog Number: CM01652

CAS号: 2390-54-7

分子式: C₁₇H₁₉ClN₂S

主要靶点: Others 主要通路: 其他 分子量: 318.86 溶解度:

H2O:12.5 mg/mL (39.20 mM),Sonification is recommended.,DMSO:21.5 mg/mL(67.43 mM)

H₃C H₃C H₃C

体外活性

Thioflavin T (ThT) is a benzothiazole dye. The Thioflavin T (ThT) exhibits enhanced fluorescence upon binding to amyloid fibrils and is commonly used to diagnose amyloid fibrils, both ex vivo and in vitro. Changes in the fluorescence excitation and emission of Thioflavin T are also dependent on the micelle formation. The Thioflavin T micelles of 3 nm diameter are directly visualized using atomic force microscopy, and bound Thioflavin T micelles are observed along the fibril length for representative fibrils. The micelles of Thioflavin T bind amyloid fibrils leading to enhancement of fluorescence emission[1]. In aqueous solutions, Thioflavin T is found to exist as micelles at concentrations commonly used to monitor fibrils by fluorescence eassay (~10-20 μ M). Specific conductivity changes are measured at varying concentration of Thioflavin T and the critical micellar concentration is calculated to be 4.0±0.5 μ M. Increasing concentration of Thioflavin T above the critical micellar concentration shows increased numbers of micelles bound along the length of the amyloid fibrils. Thioflavin T micelles are disrupted at low pH as observed by atomic force microscopy and fluorescence enhancement upon binding of Thioflavin T to amyloid fibrils also reduced by several-fold upon decreasing the pH to below 3.

描述

Thioflavin T is a widely used dye for visualizing and is a cationic Benzothiazole dye that shows enhanced fluorescence upon binding to amyloid in tissue sections.

储存

Powder: -20°C for 3 years | In solvent: -80°C for 2 years