FITC-DEAE-Polysucrose

Chemical names: FITC-(O-diethylaminoethyl)-polysucrose

Fluoresceinyl-thiocarbamoyl-(Odiethylaminoethyl)-polysucrose

Trade name: FITC-DEAE-polysucrose

CAS nr: N/A

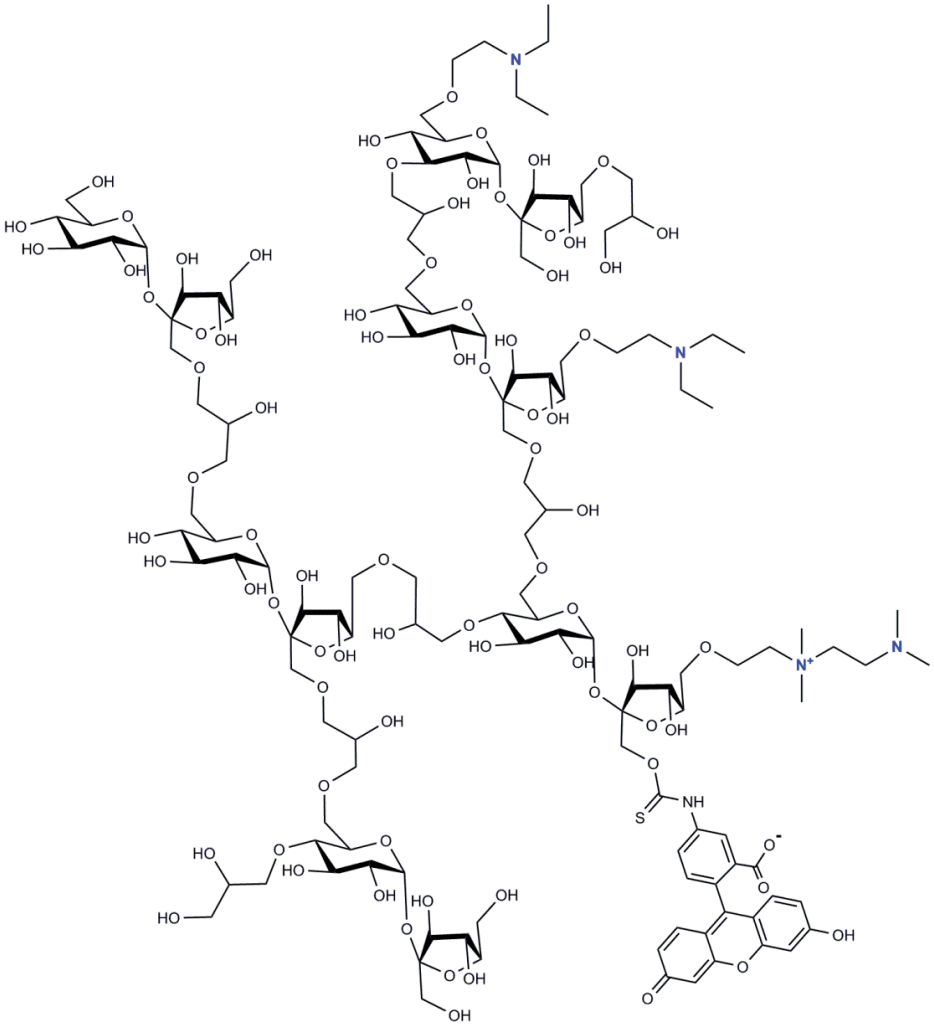

Fig. 1. Structural representation of FITC-DEAE-polysucrose

Properties

FITC- DEAE-polysucrose is supplied as a yellow powder which is readily soluble in water or buffer solutions and there is approximately one DEAE group for every five hexose groups. The limits for the degree of FITC substitution are 0.001 to 0.008. The product possesses a polycationic character. As depicted in the structural representation above, the DEAE-substituents may be present either as a single unit or as a 'tandem' unit – the latter containing a quaternary ammonium structure.

Spectral data

Excitation is best performed at 493 nm and fluorescence measured at 523 nm (see Fig.1). Measurements in biological media may significantly affect the fluorescence intensity which may be enhanced or depressed.

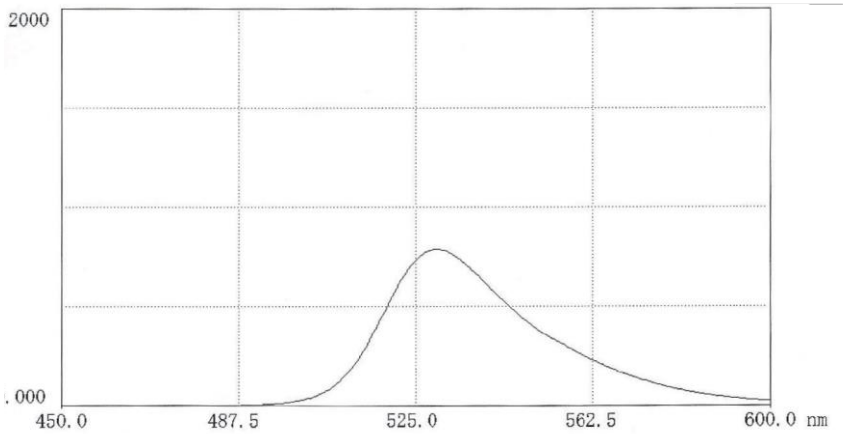

Fig. 1. *Fluorescence scan of FITC-DEAE-polysucrose 70 in 0.025M borate pH 9.0 (10mg in 50 ml buffer). Excitation 496nm; Emission 530nm. Measurements in biological media may significantly affect the fluorescence intensity which may be enhanced or depressed.*

Storage and stability

FITC-DEAE-polysucrose is delivered as a yellow powder and should be stored in well-sealed containers at ambient temperatures in the dark. The pH of the product on delivery is 6.5 – 7.0 and should not be allowed fall below pH 5– the product should not be stored at pH > 7.0 for extended periods.

Applications

The product is used for studying the permeability of polycationic polymers relative to neutral polymers in organs, tissues and cells.