

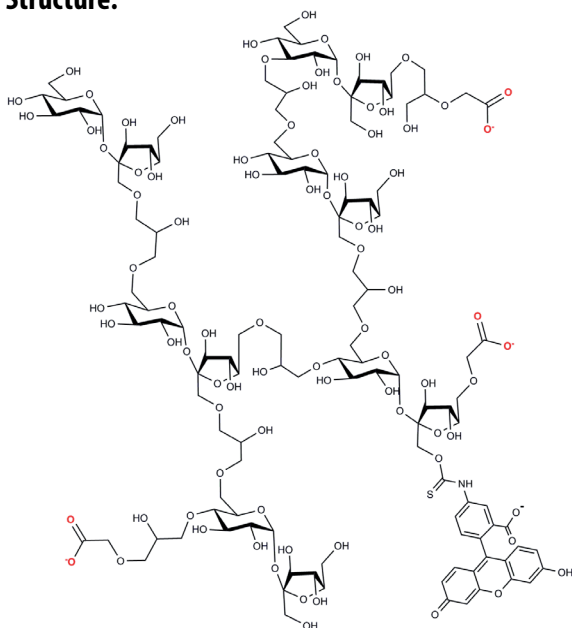
# FITC-CM-polysucrose

(FITC-CM-Ficoll®)

**Chemical Names:** FITC-(O-carboxymethyl)-polysucrose  
Fluoresceinyl-thiocarbamoyl-(O-carboxymethyl)-polysucrose

**CAS number:** not available

**Structure:**



**Spectral data:**

Excitation is best performed at 495 nm and fluorescence measured at 517 nm (see Fig.1). Measurements in biological media may significantly affect the fluorescence intensity which may be enhanced or depressed.

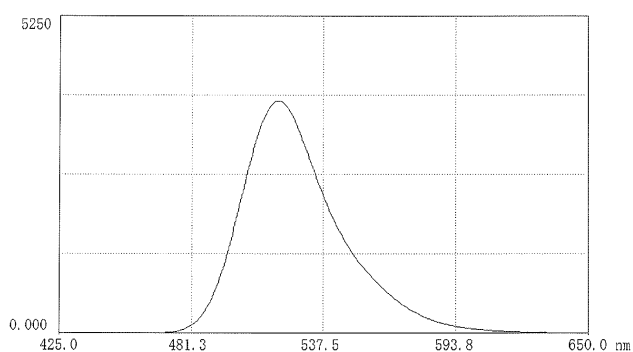


Fig. 1. Fluorescence scan of FITC-CM-polysucrose 70 in 0.025M borate pH 9.0 (11mg in 50 ml buffer). Excitation 495nm; Emission 517nm.

**Storage and stability**

FITC-CM-polysucrose is delivered as a yellow powder and should be stored in well sealed containers at ambient temperatures in the dark. Solutions may be kept at room temperature or preferably in a refrigerator in the dark at pH 6-7 for several weeks.

**Applications**

FITC-CM-polysucrose has played an interesting role in elucidating the properties of the glomerular membrane and it appears that despite the negative character of the membrane, the permselectivity of the anionic Ficoll derivatives is greater than the neutral species (1). Later studies using FITC-CM-polysucrose, however, refuted these findings (2). The significant role of solute charge in the sieving character of the glomerular membrane has been re-examined (3).

**References**

1. D. Asgierrson, D. Venturoli, B. Rippe and C. Rippe, Increased glomerular permeability to negatively charged polysucrose relative to neutral polysucrose in rats, *Am J Physiol Renal Physiol*, 291(2006), F1083-9.
2. N. Ferrell, Basal lamina secreted by MDCK cells has size- and charge-selective properties, *Am J Physiol Renal Physiol*, 300(2011), F-86-90.
3. C.F. Phelps, The physical properties of inulin solutions, *Biochem. J.*, 95(1965), 41-47.