Supporting information

Preparation and Bioactivity Assessment of Chitosan-1-Acetic Acid-5-Flurouracil Conjugates as Cancer Prodrugs

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Experimental procedure for the production of Chitin and Chitosan

Preparation of chitosan from fish scales was performed using the general method comprising of demineralization, decolonization and deacetylation. Raw fish scales were washed thoroughly with water, dried in oven and soaked in 1% HCL solution for 36 hours. It was then washed dried in oven and kept in 2N NaOH solution for 36 hours for demineralization. Fish scales were then kept in potassium permanganate solution (having composition 1g of Oxalate acid in 100 mL water) for the process of decolourization of the experimental sample. These process resulted in chitin as the product which was further treated with 50% w/v NaOH for the process of deacetylation resulting in chitosan as the end product.[1]

Figure captions:

Figure S1 Extraction of Chitosan from fish scale.

Figure S2 FT-IR spectra of Chitosan.

Figure S3 ^{1}H NMR spectra of 1-acetic acid-5-Fluorouracil (FUAC).

Fish scales

Washing and Drying

1% HCl

Drying

0.5 N NaOH

Drying

$KMnO_4$

Filtring

Chitosan

Figure S1 Extraction of Chitosan from fish scale

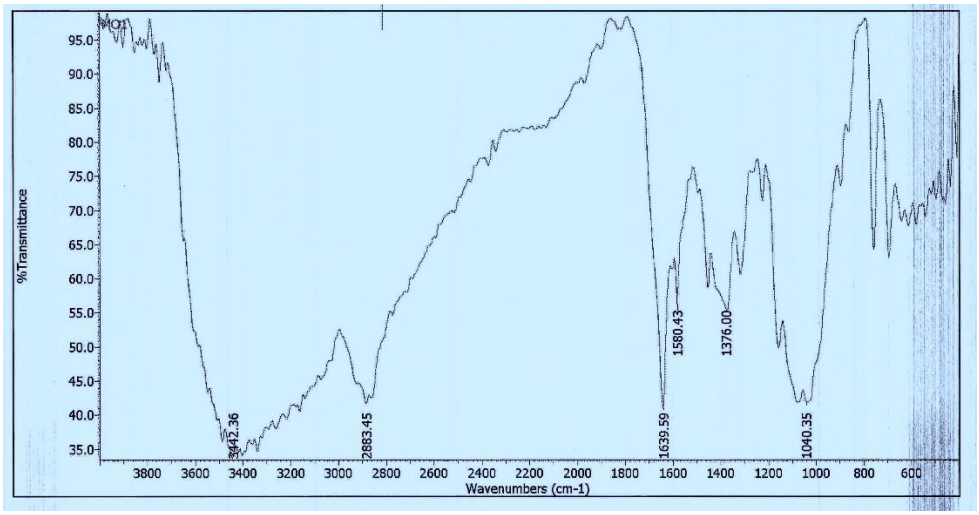

Figure S2 FT-IR spectra of Chitosan

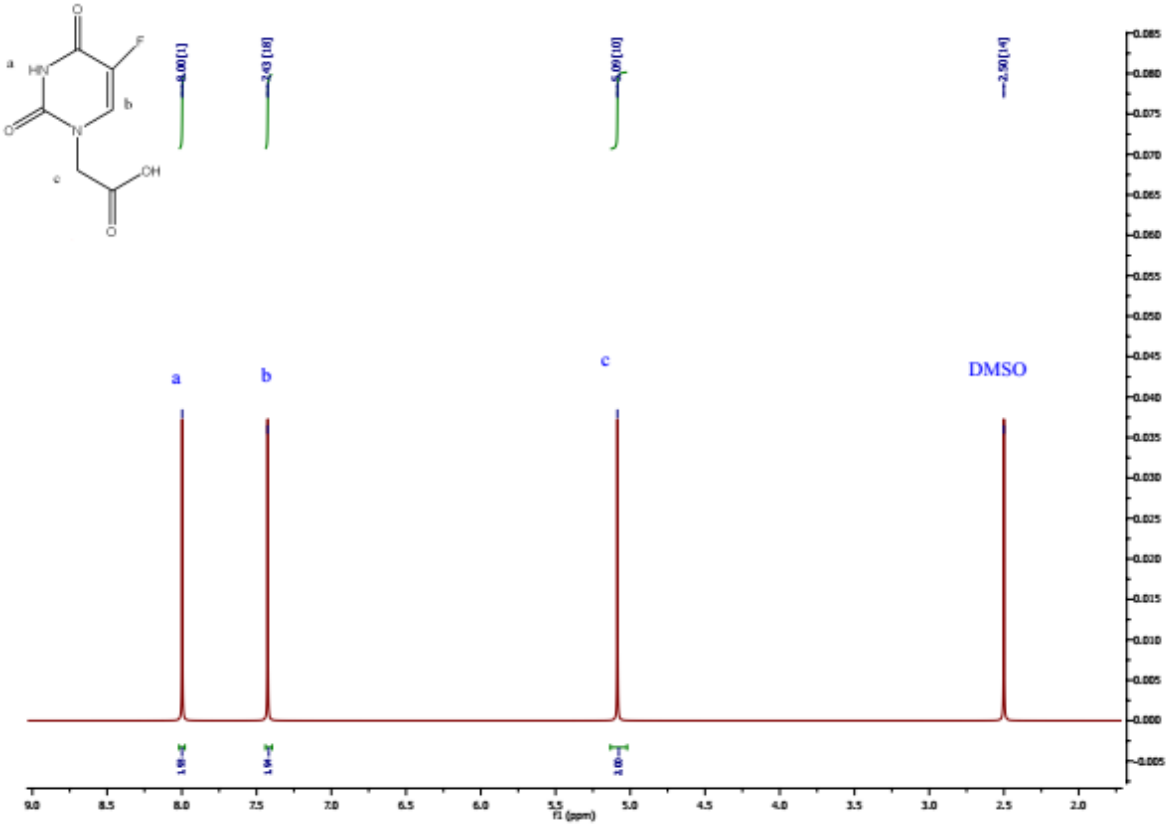

Figure S3 ^{1}H NMR spectra of 1-acetic acid-5-Fluorouracil (FUAC).