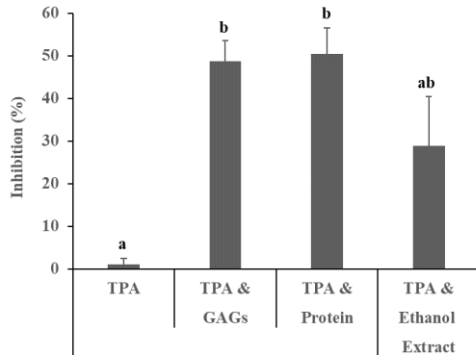
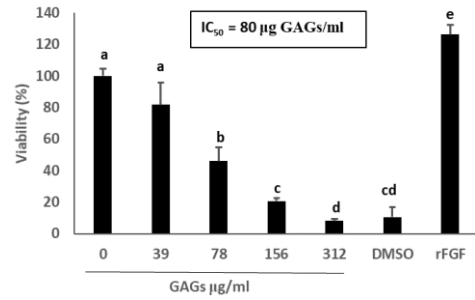


## Online Supplementary Materials

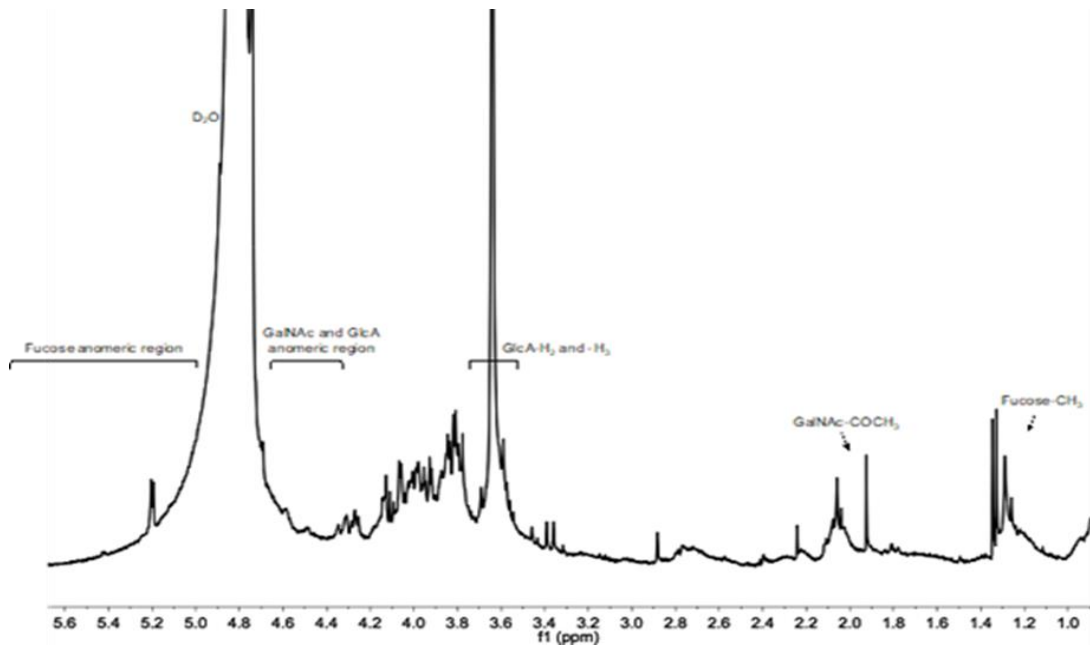


(a)

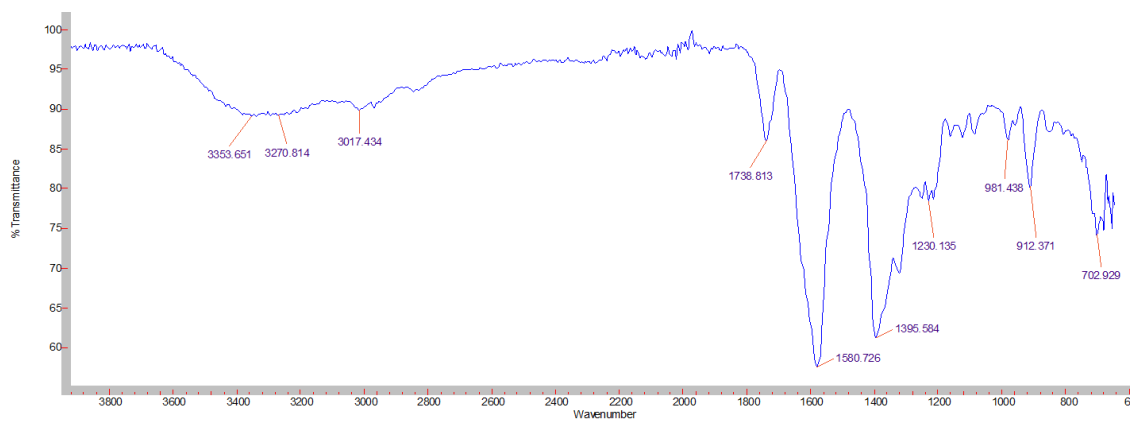


(b)

**Supplemental Figure S1.** Crude GAGs from the body wall of *Ibadionotus* inhibit 12-O-tetradecanoylphorbol-13-acetate (TPA)-induced proliferation of mouse splenocytes (a). High concentrations of purified GAGs reduce the viability of a human breast-derived fibroblast cell line (b).  $N \geq 4$  per group and values with distinct superscripts differ significantly from each other ( $p \leq 0.05$ ).



(a)



(b)

**Supplemental Figure S2. GAGs preparation isolated from body wall of *I. badionotus***  
 a) <sup>1</sup>H NMR spectra at 600 MHz of fucosylated chondroitin sulphate of sea cucumber (*I. badionotus*)  
 b) Infrared spectra of GAGs from sea cucumber (*I. badionotus*).



**Supplemental Figure S3.** Representative colons from mice treated with DSS & *Ibadionotus* GAGs (a), or DSS (b) and untreated controls (c).