

# Study on Immunoregulatory Effects of Fucoidan from *Sargassum graminifolium* *in vivo* and Immunoactivation Activity of Its Fecal Fermentation Products Using Co-Culture Model

Cuifang Wang <sup>1,2,\*</sup>, Lan Huang <sup>3</sup>, Yaolong Huang <sup>1</sup>, Xin, Tian <sup>1</sup> and Jieqing Liu <sup>3,\*</sup>

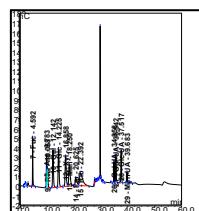
<sup>1</sup> College of Oceanology and Food Science, Quanzhou Normal University, Quanzhou 362000, China; huangyaochang@stumail.qztc.edu.cn (Y.H.); 201005017@stumail.qztc.edu.cn (X.T.)

<sup>2</sup> Fujian Province Key Laboratory for the Development of Bioactive Material from Marine Algae, Quanzhou Normal University, Quanzhou 362000, China

<sup>3</sup> School of Medicine, Huaqiao University, Quanzhou 362021, China; hl287216411@163.com

\* Correspondence: wangcuifang@qztc.edu.cn (C.W.); liujieqing@hqu.edu.cn (J.L.)

## Monosaccharide composition results of SGF-1 and SGF-2



**Figure S1.** Ion chromatogram of standard sample.



**Figure S2.** Ion chromatogram of SGF-1.

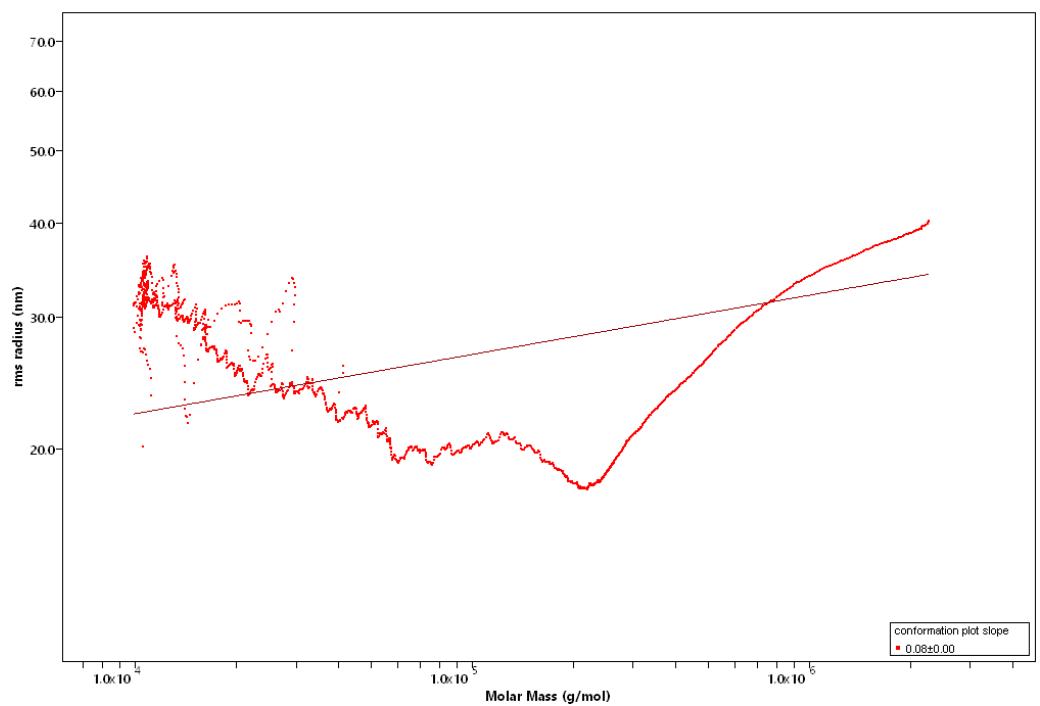


**Figure S3.** Ion chromatogram of SGF-2.

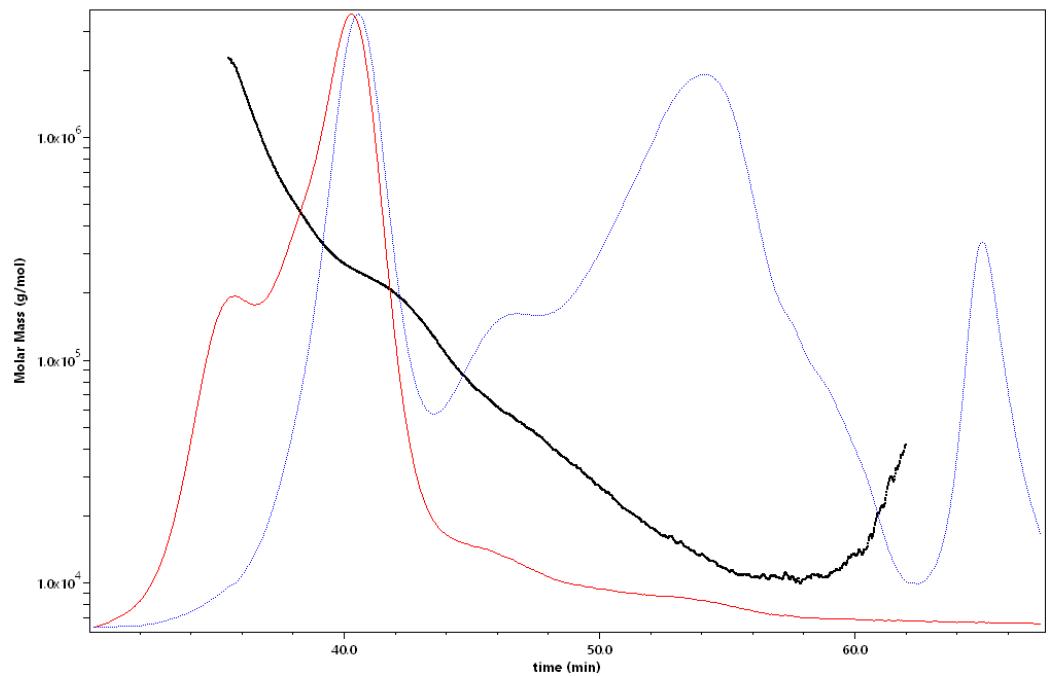
#### Molecular weight test results of SGF-1 and SGF-2

**Table S1.** Molecular weight determination of grade SGPF-1and SGPF-2.

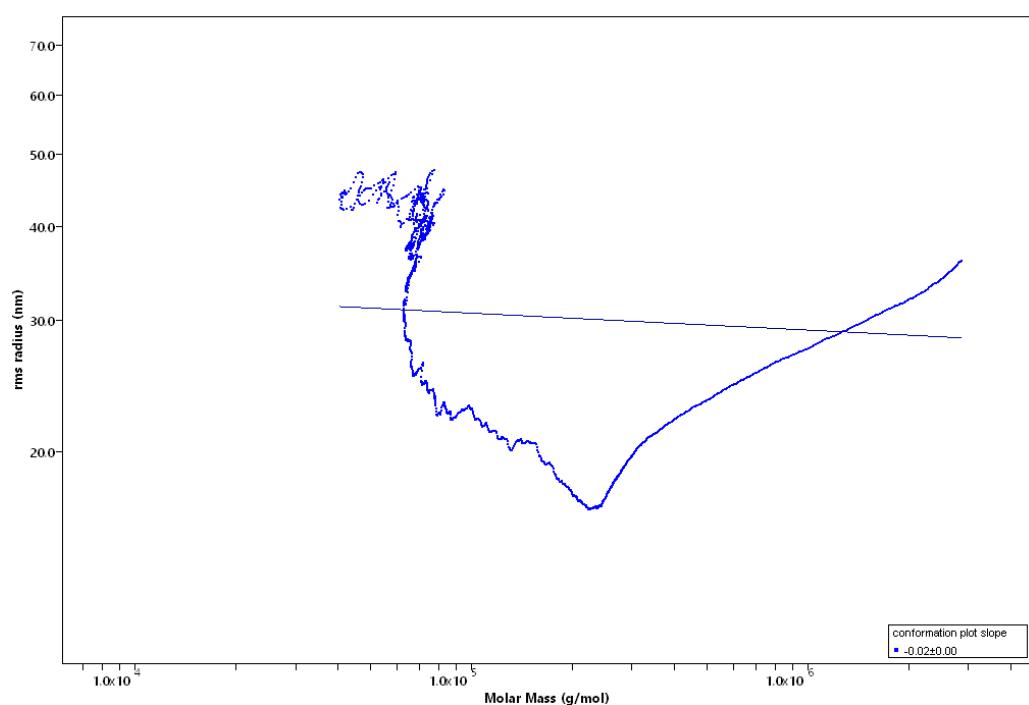
	Mn (kDa)	Mp (kDa)	Mw (kDa)	Mz (kDa)
SGF-1	23.724	250.395	112.96	454.32
SGF-2	138.514	255.486	258.066	606.787



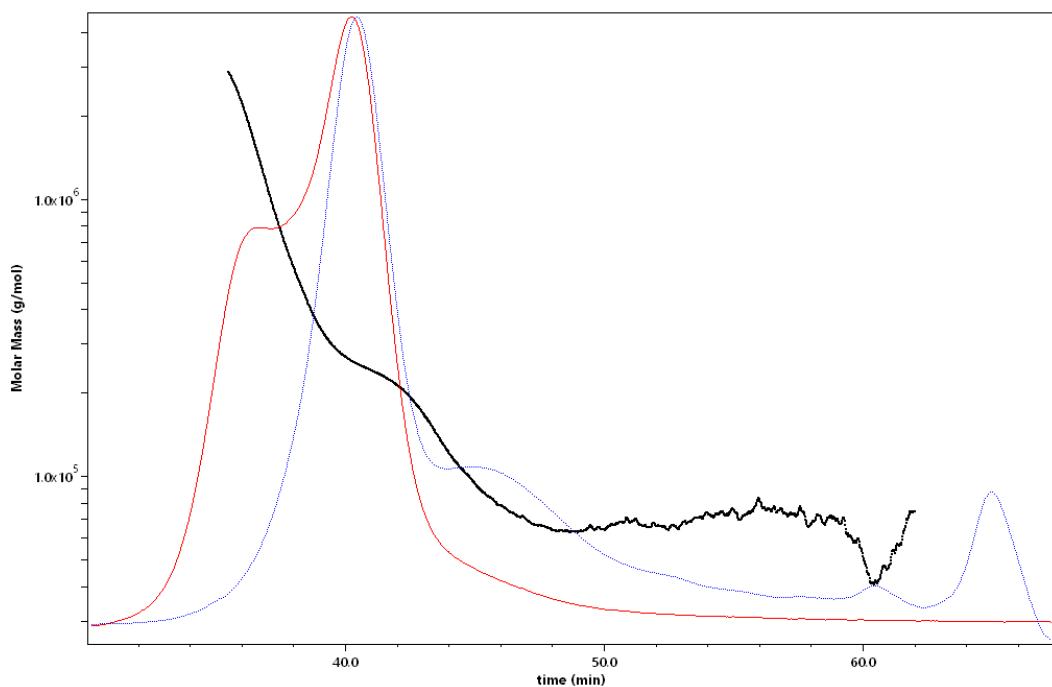
**Figure S4.** RMS conformation plot of SGF-1.



**Figure S5.** Absolute molecular weight Analysis plot of SGF-1.



**Figure S6.** RMS conformation plot of SGF-2.



**Figure S7.** Absolute molecular weight Analysis plot of SGF-2.