

# Supporting Information

## Pharmacokinetics and Pharmacodynamics of a Depolymerized Glycosaminoglycan from *Holothuria Fuscopunctata*, a Novel Anticoagulant Candidate, in Rats by Bioanalytical Methods

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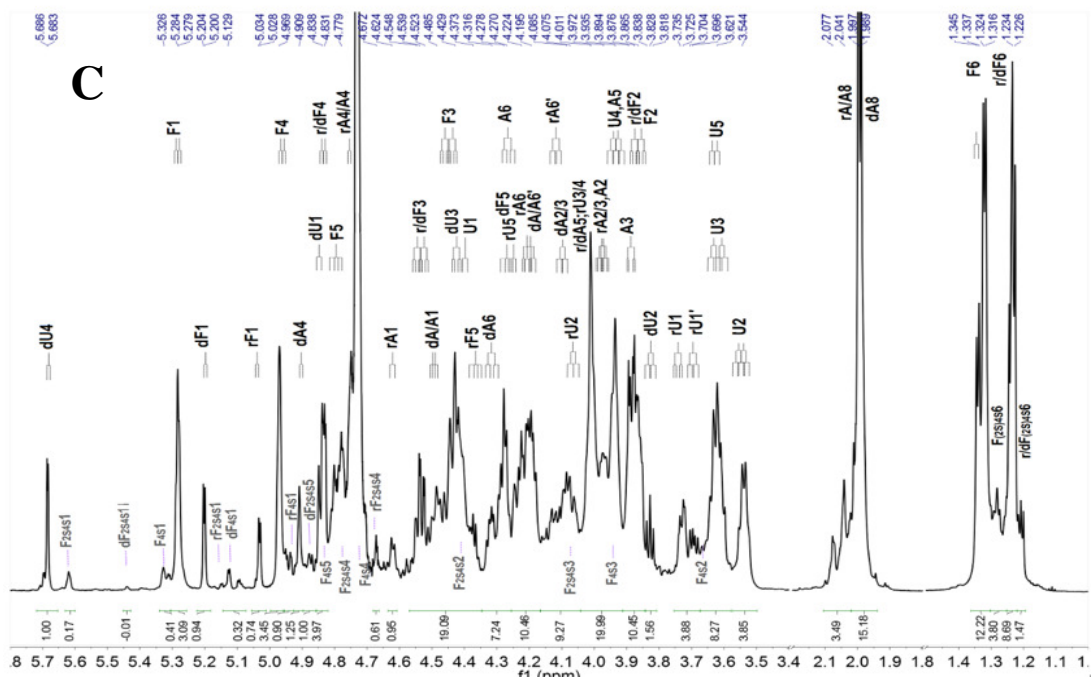
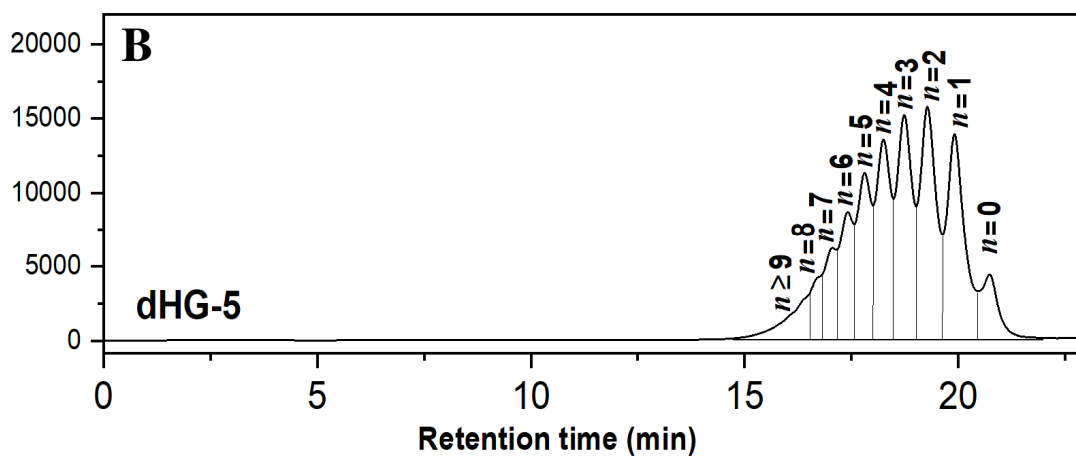
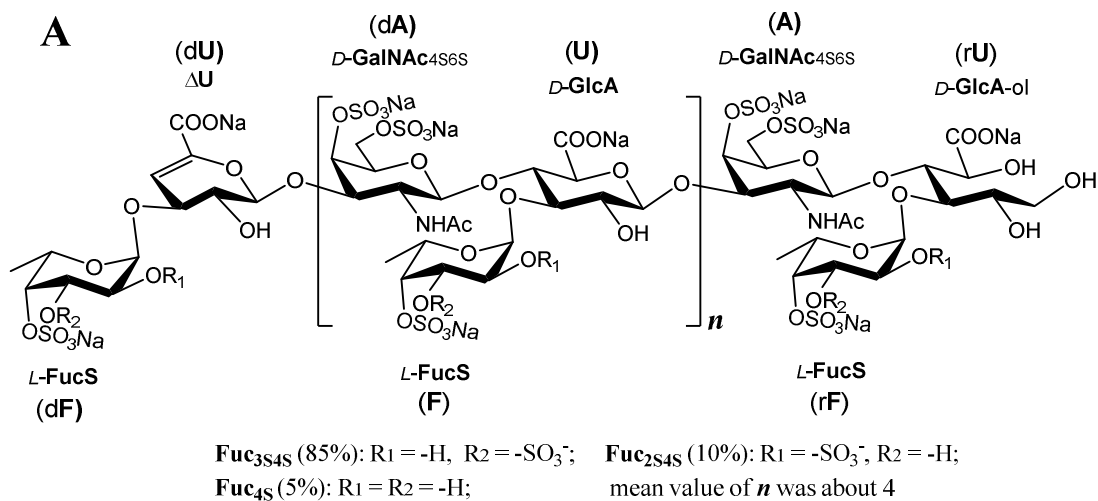


Figure S1. Structure (A), HPGPC profile (B) & 1H NMR spectra (C) of dHG-5 [14, 15].

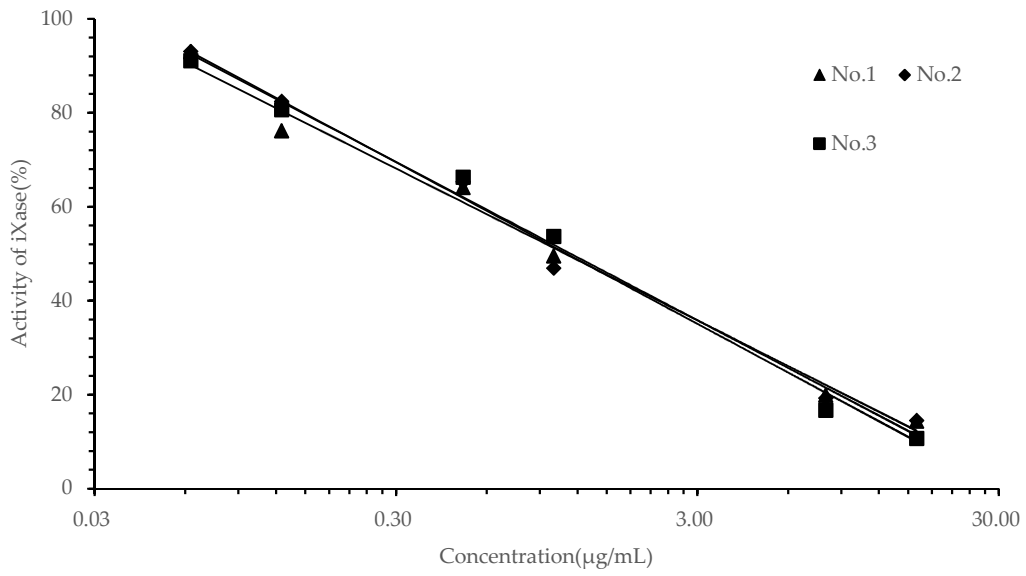


Figure S2. The calibration curves for dHG-5 over the concentration range of 0.0625-16 µg/mL in rat plasma.

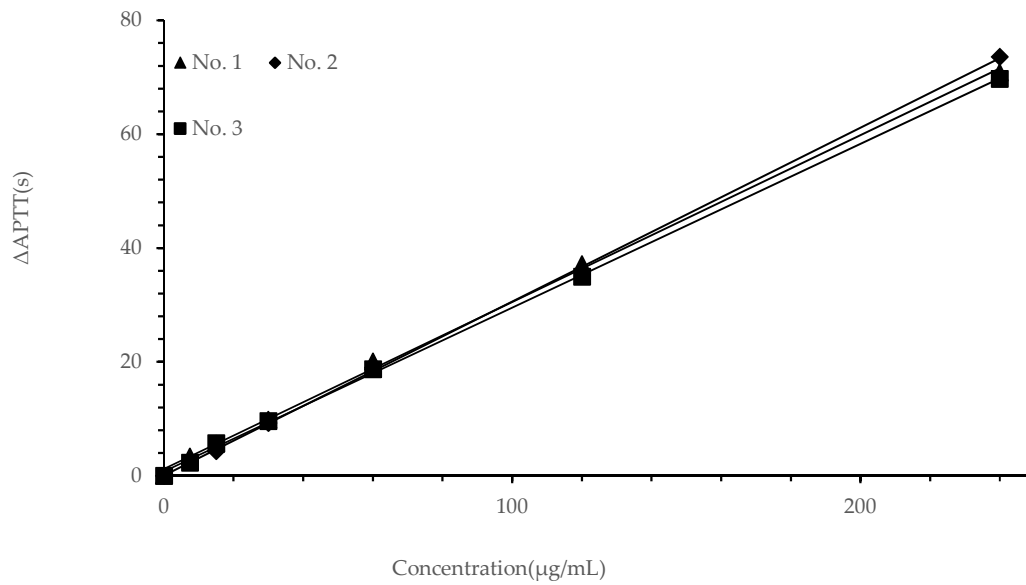
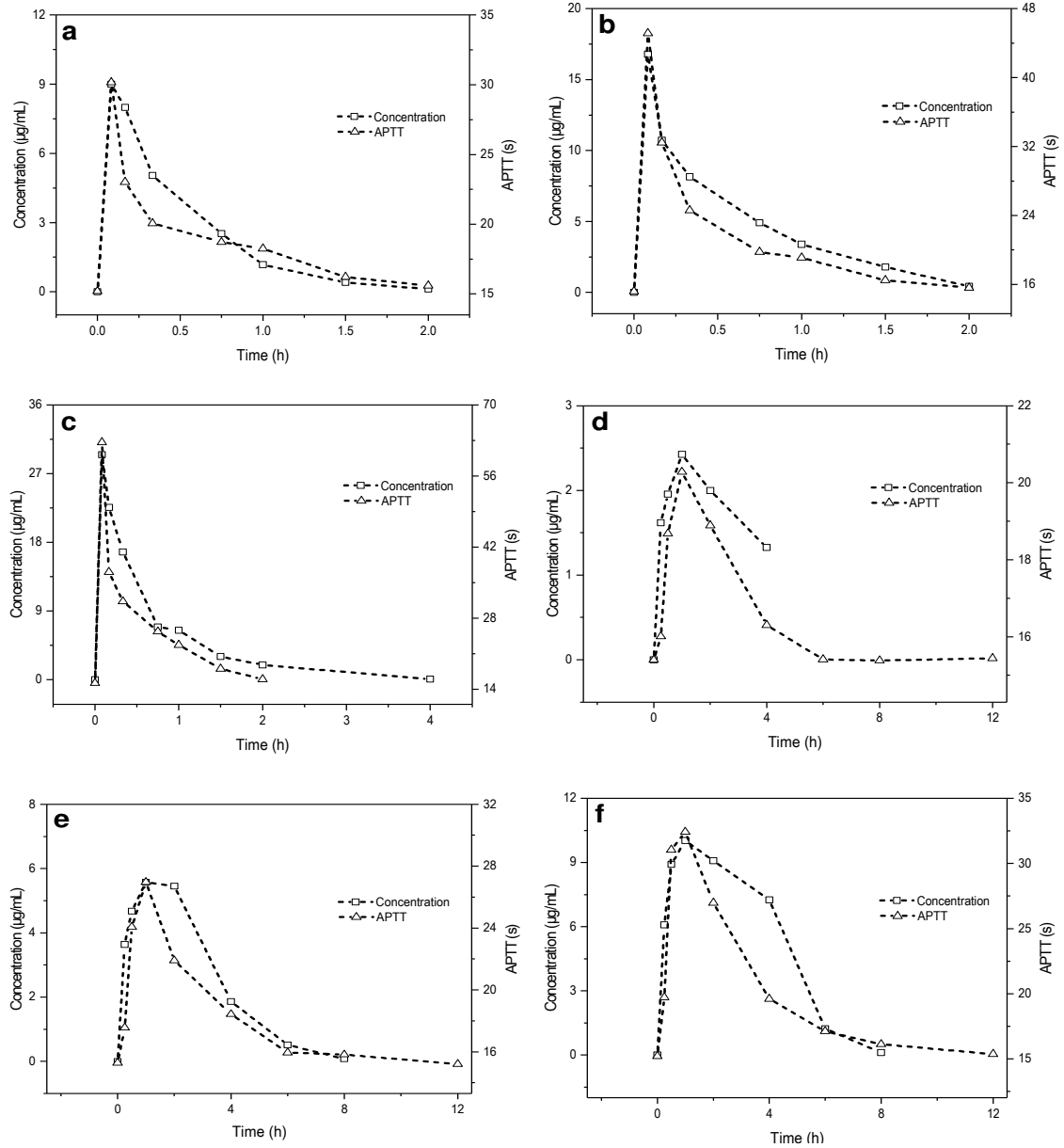


Figure S3. The calibration curves for dHG-5 over the concentration range of 7.5-240 µg/mL in rat urine.



**Figure S4.** The relationship between dHG-5 plasma concentration and plasma APTT. dHG-5 plasma concentration was determined by the anti-iXase method, and the anticoagulant activity was detected using rat plasma, after intravenous administration at 3.00 mg/kg (a), 5.00 mg/kg (b) and 9.00 mg/kg (c) and subcutaneous administration to rats at 5.00 mg/kg (d), 9.00 mg/kg (e) and 16.2 mg/kg (f). Data were expressed as means  $\pm$  SD (n=5).

**Table S1.** Regression equations for determination of dHG-5 concentration in rat plasma.

No.	Regression equation	R <sup>2</sup>
1	$y = -14.04 x + 51.24$	0.9902
2	$y = -14.63 x + 51.91$	0.9904
3	$y = -14.95 x + 51.49$	0.9916

**Table S2.** Regression equations for determination of dHG-5 concentration in rat urine.

No.	Regression equation	R <sup>2</sup>
1	$y = 0.2931 x + 1.1932$	0.9989
2	$y = 0.3055 x + 0.0195$	0.9997
3	$y = 0.2878 x + 0.7282$	0.9994