

## **Supporting Information**

### **Electrospun EVOH/AST-120 hybrid nanofiber membranes for removal of indoxyl sulfate from blood**

Makoto Sasaki,<sup>ab</sup> Rieko Hirata,<sup>c</sup> Ayano Konagai<sup>c</sup> and Mitsuhiro Ebara<sup>\*ab</sup>

<sup>a</sup> *Research Center for Macromolecules and Biomaterials, National Institute for Materials Science (NIMS), 1-1 Namiki, Tsukuba, Ibaraki, 305-0044, Japan.*

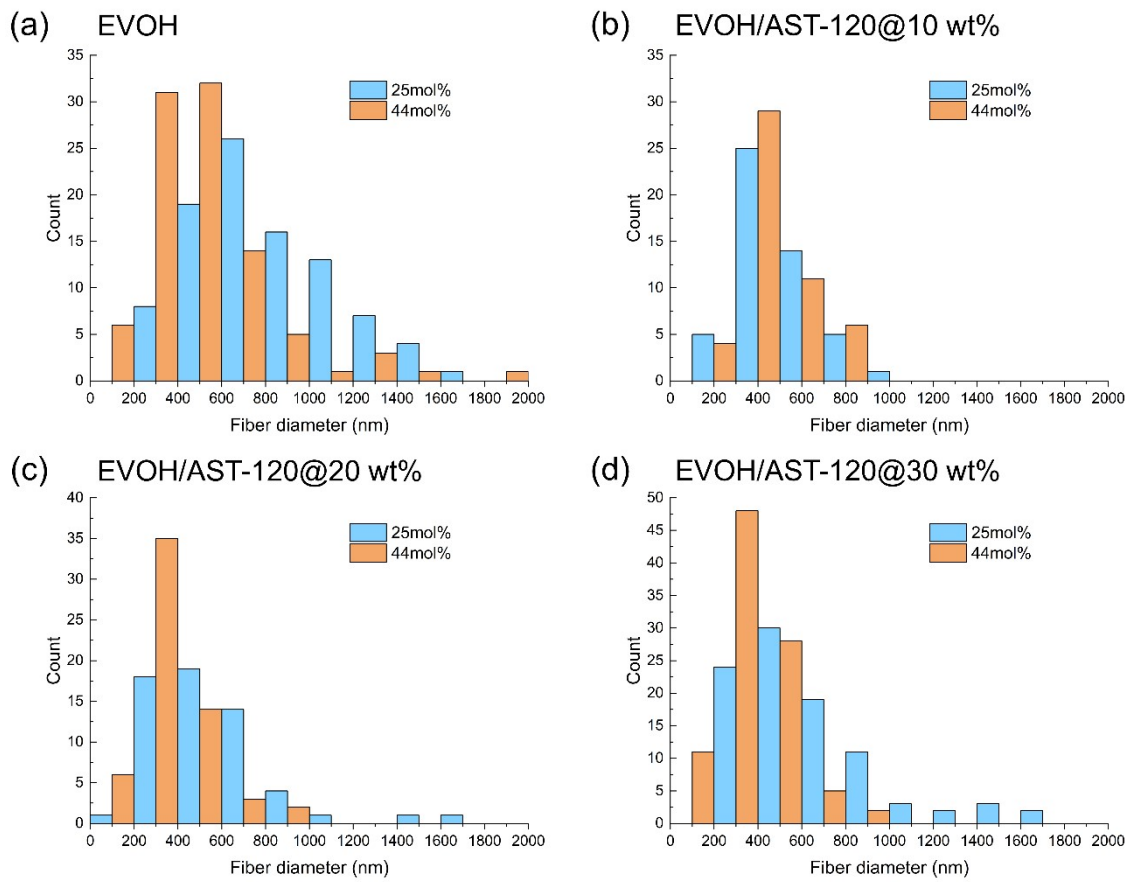
<sup>b</sup> *Graduate School of Pure and Applied Sciences, University of Tsukuba, 1-1-1 Tennodai, Tsukuba, Ibaraki, 305-8577, Japan.*

<sup>c</sup> *Research and Development Division, KUREHA CORPORATION, 16 Ochiai, Nishiki-machi, Iwaki, Fukushima, 974-8686, Japan.*

\*Corresponding author

Mitsuhiro Ebara

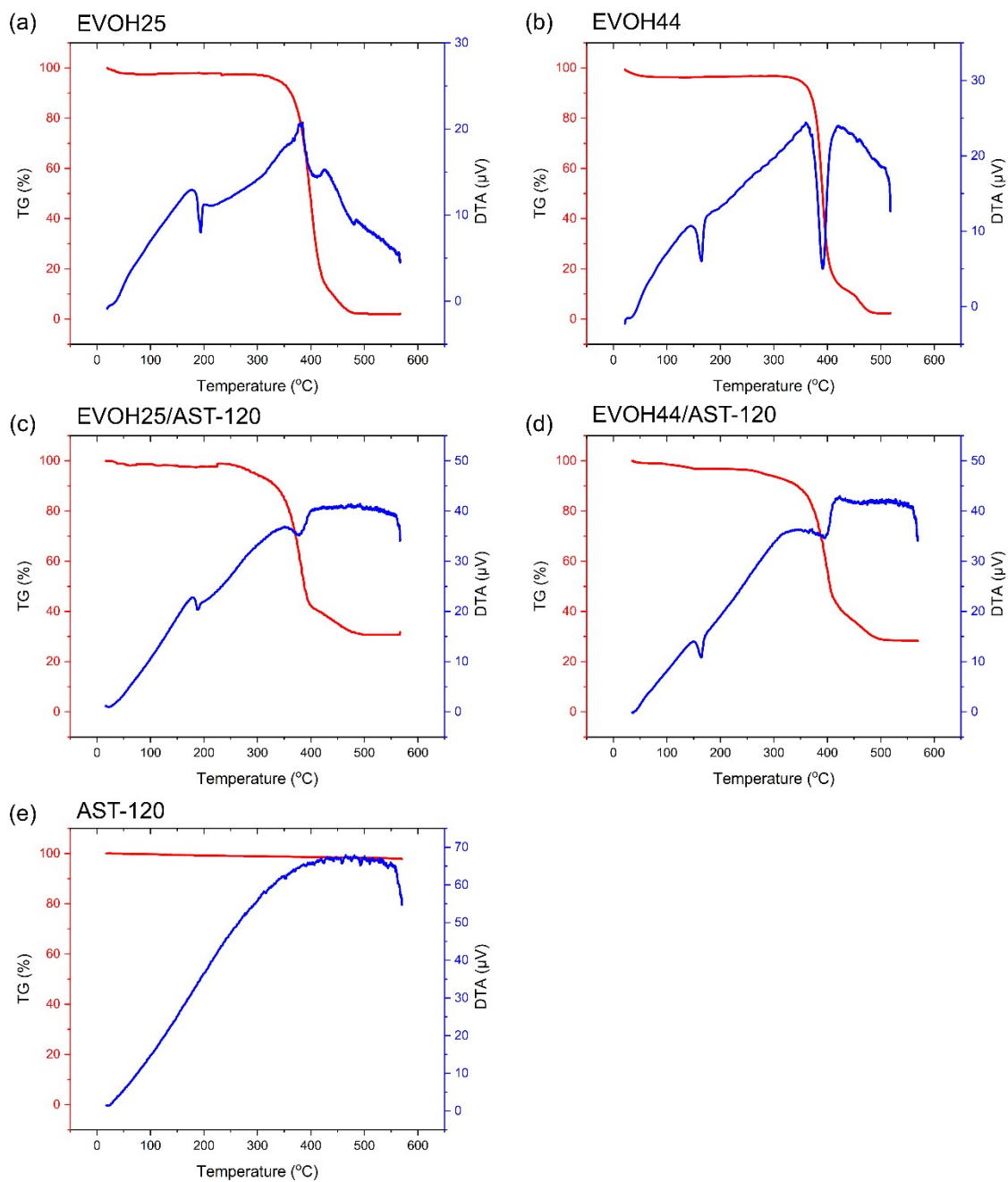
E-mail address: [EBARA.Mitsuhiro@nims.go.jp](mailto:EBARA.Mitsuhiro@nims.go.jp)



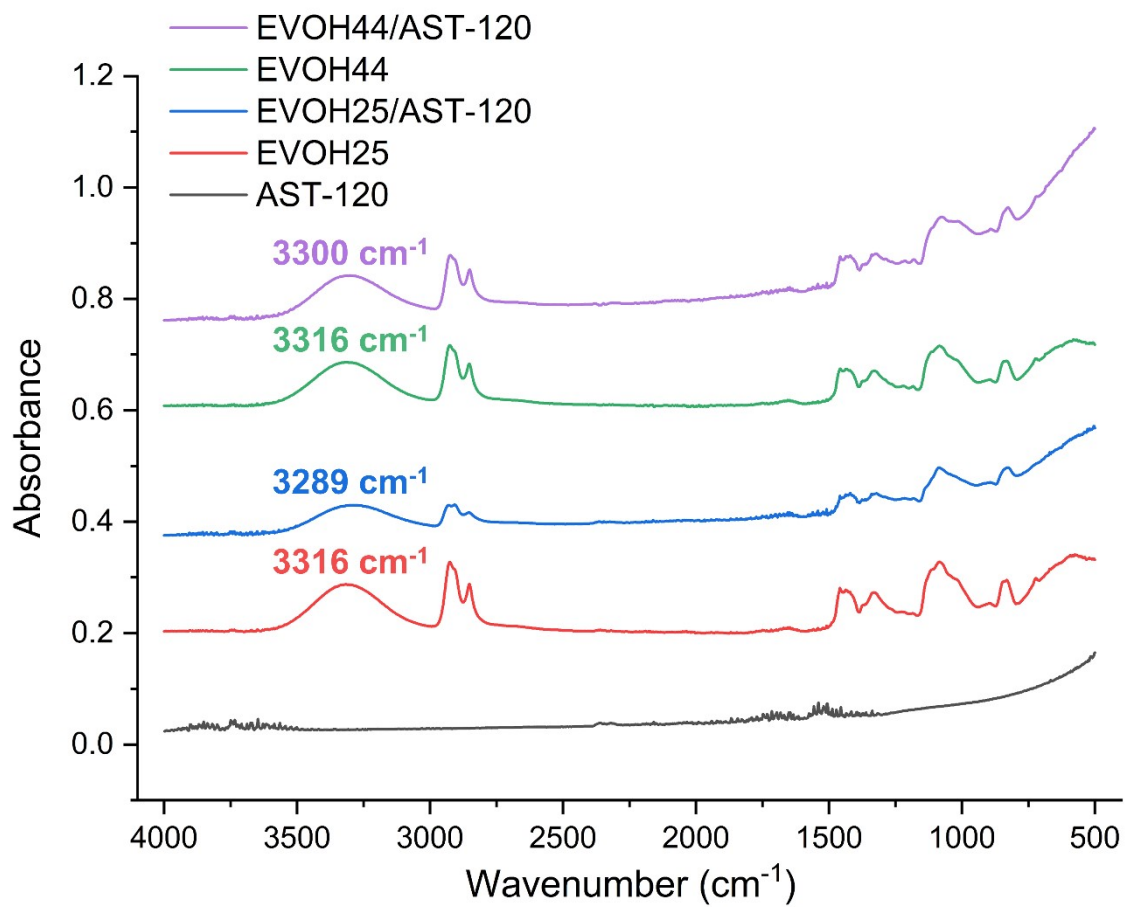
**Fig. S1** Histograms of fiber diameter of the EVOH/AST-120 nanofibers with different ethylene ratios. The containing ratio of AST-120 in nanofibers is (a): 0 wt%, (b) 10 wt%, (c) 20 wt%, and (d) 30 wt%.

**Table S1** The mean value, standard deviation, maximum value, and minimum value of each nanofiber sample.

Sample	Mean value (nm)	Std. dev.	Max value (nm)	Min value (nm)
EVOH25	890	230	1470	460
EVOH25/AST-120@10 wt%	470	170	1000	220
EVOH25/AST-120@20 wt%	600	390	2640	140
EVOH25/AST-120@30 wt%	680	330	1520	240
EVOH44	770	360	1820	340
EVOH44/AST-120@10 wt%	480	170	860	150
EVOH44/AST-120@20 wt%	360	170	930	150
EVOH44/AST-120@30 wt%	390	170	980	80



**Fig. S2** TG-DTA curves of (a) EVOH25 nanofibers, (b) EVOH44 nanofibers, (c) EVOH25/AST-120 nanofibers, (d) EVOH44/AST-120 nanofibers, and (e) AST-120 powder.



**Fig. S3** FT-IR spectra of AST-120 powder, EVOH nanofibers, and EVOH/AST-120 nanofibers.