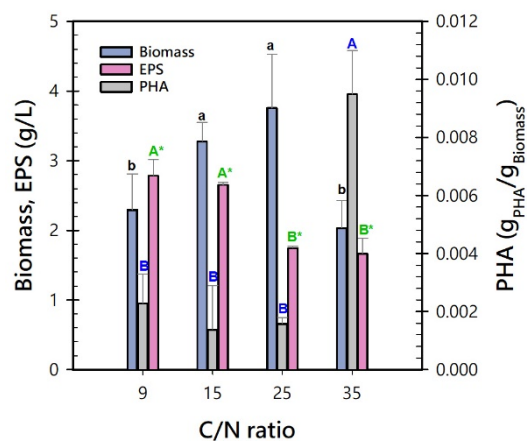
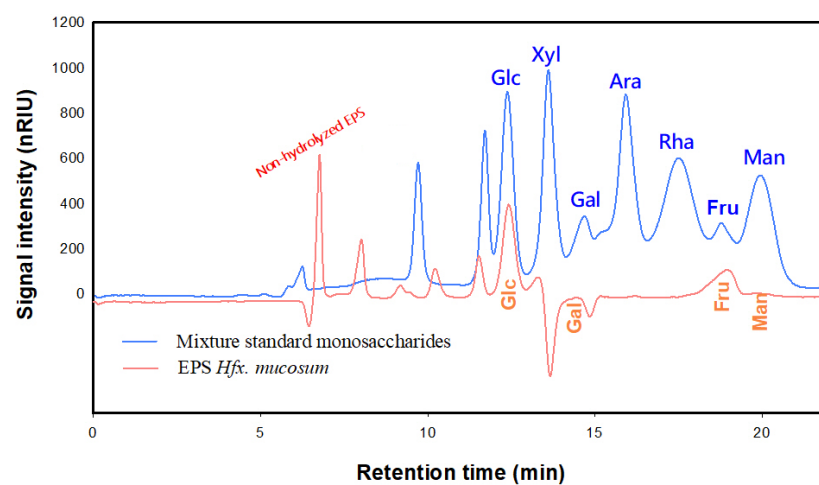


Supplementary data



ESI Fig. S1. Co-rodution of PHA and EPS by *Haloferax mucosum* growing on modified ATCC 2185 media with C/N ratio of 9, 15, 25 and 35.



ESI Fig. S2 . Elution profile for EPS hydrolysate produced by *Haloferax mucosum* and monosaccharides standard mix (includes glucose (Glc), xylose (Xyl), galactose (Gal), rhamnase (Rha), fructose (Fru) mannose (Man), and arabinose (Ara)).

ESI Table 1. Chemical shift assignments for EPS produced by *Hfx. mucosum* glycosyl residues

Glycosyl residues	Hydrogen Associated											Score (%)
	CH ₂	CH ₂ b	CH ₃	H ₁	H ₁ b	H ₂	H ₃	H ₄	H ₅	H ₆	H ₆ b	
→4)-β-Galp-(1→				4.39		3.45	3.60	3.94	3.66	3.65	—	100
→4)-β-GlcpANAc-(1→			2.02	5.12		3.90	4.14	4.46	4.46			85.71
→4)-β-GlcpN-(1→				4.54			3.77	3.8	3.77		3.91	75
→3)-α-Manp-(1→						4.26	3.96		3.67	3.66	3.8	71.43
→3)-β-Galp-(1→				4.4			3.64	3.78	3.9	3.66		71.43
→4)-β-Manp-(1→						3.71	3.93	3.76		3.95	4.12	71.43
Manp-α-(1→				4.8			3.54		3.71	3.76	3.56	71.43
→6)-β-Fruf-(2→				3.68	3.61		4.26	4.1	4.72	3.66		66.67
→3,4)-α-Rhap-(1→				4.92		3.47			3.91	1.23	—	66.67
→3,4)-α-Rhap-(1→				4.92		3.47			3.91	1.23	—	66.67
→4)-β-GalpAOEt-(1→	4.22	4.24	1.06	5.11			4.14					62.50
→4)-β-GlcpAOEt-(1→	4.22	4.24	1.06	5.09			4.03					62.50
→4)-β-GalpA-(1→				5.11			4.14	4.36				60
→4)-β-GlcpA-(1→				5.09				4.44	4.48			60
→4)-β-GlcpNAc-3-O-SO ₃ -(1→				4.72		3.91		3.95		—	—	60
→4)-α-Glcp-(1→				5.33		3.52				3.56	3.77	57.14
→6)-β-Fruf-(1→				3.65	3.90			4.11		3.77		57.14
→2)-α-Rhap-(1→				5.31		4.15				1.29	—	50
→3,6)-β-Galp-(1→							3.95		3.8		3.92	50
→4)-α-Galp						3.48	3.67		3.77		—	50
→6)-α-Glcp-(1→				—		3.52			3.49	3.92		50
α-Glcp-(1→				5.33			3.53		3.69		—	50
→4)-β-GlcpNAc-(1→			2.02			3.93	4.27				3.92	44.44
→3,4)-β-Galp-(1→				4.37		3.40	3.68		3.95			42.86
→6)-β-Galp-(1→									3.77	3.93	3.7	42.86
β-Galp-(1→						3.49				3.76	3.9	42.86
→4)-β-Galp				4.6				—	—	—	—	33.33
→4)-β-GalpAOMe-(1→				5.15			4.14					33.33
→4)-β-GlcpAN-(1→				4.91		3.64						33.33
→4)-β-GlcpAOMe-(1→				5.09			4.03	4.56				33.33
→3)-α-Glcp-(1→							3.78		4.03			28.57