



Supplementary Figure S1. Predicted transmembrane-spanning domains (TMD) of *E. marinus* (a) Elov1/7-like, (b) Elov4 and (c) Elov6. Inside-Cytosol; Outside-Lumen.

Supplementary Table S1. (a) Subcellular localisation prediction of the three Elovl proteins from *E. marinus* and (b) Elovl type determination. Prediction was obtained using the DeepLoc 1.0 online tool. Data are represented as % of likelihood.

(a)

	Subcellular localisation (% likelihood)									
	Endoplasmic reticulum	Cell membrane	Golgi apparatus	Lysosome/Vacuole	Mitochondrion	Peroxisome	Cytoplasm	Nucleus	Plastid	Extracellular
ELOVL1/7-LIKE	79.85	10.74	5.96	3.42	0.02	0	0	0	0	0
ELOVL4	87.77	5.75	4.76	1.68	0.02	0	0	0	0	0
ELOVL6	81.62	6.71	6.12	5.22	0.17	0.14	0.01	0	0	0

(b)

	Protein type (% likelihood)	
	Soluble	Membrane
ELOVL1/7-LIKE	0	100
ELOVL4	0.01	99.99
ELOVL6	0.01	99.99