Fig. S1

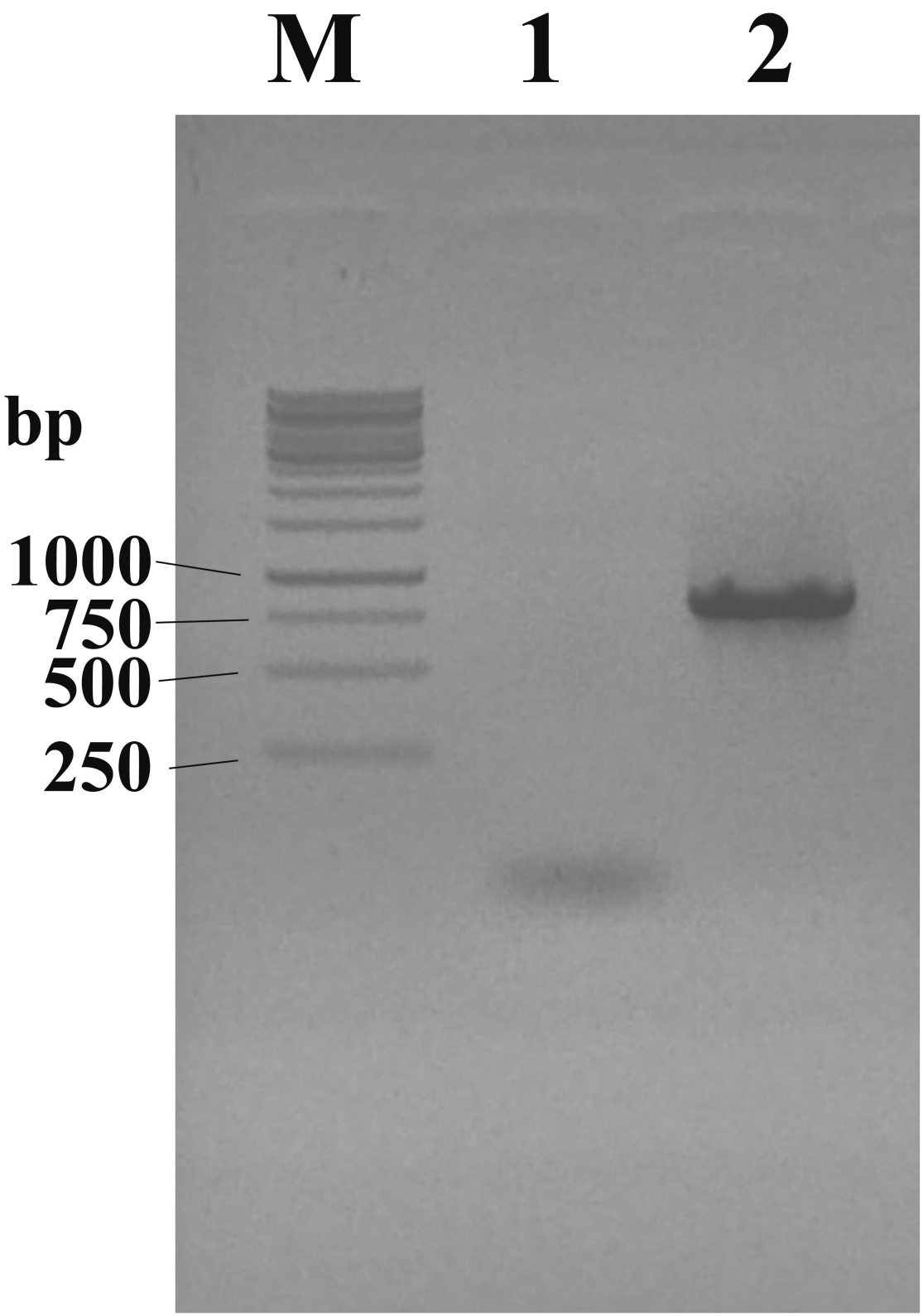
Agarose gel of the PCR reactions performed using DNA extracted from *Dunaliella* cells (lane 2) and *E. focardii* cells (lane 3) as templates, using the same primers of Fig. 6. A clear band is present only in the PCR sample containing *E. focardii* DNA(lane 3).

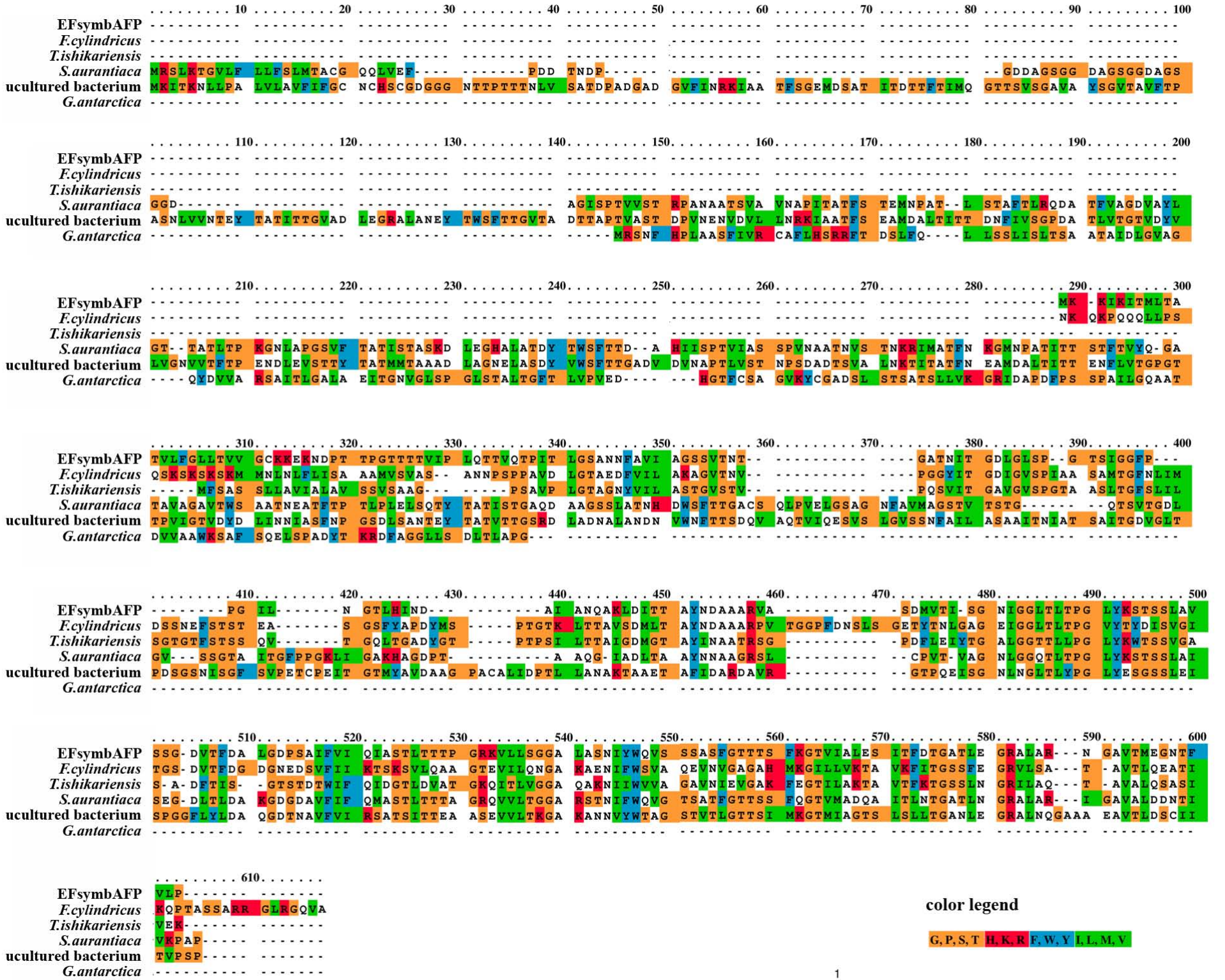
Fig. S2

Multiple sequence alignment of EFsymbAFP with the IBP sequences from *Fragilariopsis cylindrus*, CN212299; *Typhula ishkarioensis*, BAD02897; *Glaciozyma antarctica* ACX31168; *Stigmatella aurantiaca* (strain DW4/3-1), using the PRALINE multiple sequence alignment tool. Colours indicated amino acid residues with different chemical-physical properties: small non polar (orange), large non-polar (blue), and charged (red).

Fig. S3

Multiple sequence alignment of EFsymbIBP with the IBP sequences from *Psychroflexus torquis* (strain ATCC700755), YP_006867144; *Flavobacteriaceae bacterium* (strain 3519-10), gi_255534643; *Fragilariopsis cylindrus*, CN212299; *Flammulina populicola*, ACL27144; *Lentinulaedodes edodes*, ACL27145; *Glaciozyma antarctica* ACX31168; *Chlamydomonas* sp., EU190445, using the PRALINE multiple sequence alignment tool. Colours indicated amino acid residues with different chemical-physical properties.


M
1
2
bp
1000
750
500
250


EFsymbAFP
F.cylindricus
T.ishikariensis
S.aurantiaca
ucultured bacterium
G.antarctica
color legend
G, P, S, T
H, K, R
F, W, Y
I, L, M, V


EFsymbIBP
F.bacterium
P.torquis
Chlamidomonas sp
F.cylindricus
F.populicola
L.edodes
G.antarctica
color legend
G, P, S, T
H, K, R
F, W, Y
I, L, M, V