

Supplementary Table S1 Utilization of mono-, di-, tri-, and polysaccharides by *Polaribacter* strains. All strains were negative for growth on L-rhamnose and D-trehalose.

	<i>P. sp.</i> Hel1_85	<i>P. sp.</i> Hel1_33_49	^a <i>P. irgensii</i> 23-P ^T	^b <i>P. dokdonensis</i> DSW-5 ^T	^c <i>P. butkevichii</i> KMM 3938 ^T	^a <i>P. franzmannii</i> 301 ^T
Temperature for growth from [°C]	8	-2	-1.5	4	4	4
Temperature for growth to [°C]	28	22	17	33	32	10
Temperature optimum [°C]	22	14	12	26	22	NA
Utilization of amino acids:						
Casamino acids	+	+	+	-	NA ^f	+
Peptone tryptone	+	+	NA ^f	+	NA ^f	NA ^f
Yeast extract	+	+	+	NA ^f	NA ^f	+
Gelatin	+	+	-	NA	+	+
Utilization of monosaccharides:						
D-galactose	+	-	+	-	+	+
D-mannose	+	+	+	-	+	+
D-fructose	+	-	-	-/+ ^d	NA	+
D-glucose	-	+	+	-/+ ^d	+	+
D-mannitol	+	-	NA	-	+	-
DL-xylose	+	-	-	-	+	-
DL-arabinose	-	+	-	-	-	-
Utilization of di-, trisaccharides:						
D-sucrose	+	-	-	-/+ ^d	-	+
D-maltose	+	+	-	-	NA	+
D-cellobiose	-	+	-	-/+ ^d	NA	-
L-raffinose	-	+	-	+	NA	-
Utilization of N-acetyl-D-glucosamine						
	-	-	-	-	-	+

	<i>P. sp.</i> Hel1_85	<i>P. sp.</i> Hel1_33_49	^a <i>P. irgensii</i> 23-P ^T	^b <i>P. dokdonensis</i> DSW-5 ^T	^c <i>P. butkevichii</i> KMM 3938 ^T	^a <i>P. franzmannii</i> 301 ^T
Utilization of polysaccharides:						
Cellulose (filter)	+	+ ⁻	NA	-	-	
Carboxymethyl cellulose	+	+	NA	NA	-/+ ^e	NA
Laminarin	+	+	NA	NA	NA	NA
Agar	+	+	NA ^{-d}	-	NA	
Xanthan	+	+	NA	NA	NA	NA
Carrageenan (κ and ι)	+	+	NA	NA	NA	NA
Chondroitin sulfate	+	+	NA	NA	NA	NA
Glycogen	+	+	NA ^{+d}	NA	NA	

^a data from Gosink *et al.* (1998).

^b data from Yoon *et al.* (2006).

^c data from Nedashkovskaya *et al.* (2006).

^d data from Fukui *et al.* (2013).

^e data from Kim *et al.* (2013).

^f grew on marine broth 2216.

NA: not available.