

Supplementary Table S1. Utilization of carbon compounds by different species of the genus*Asticcacaulis*

Compounds tested*	Strain Z-0023 ^T	<i>A. excentricus</i> ^a	<i>A. biprosthecium</i> ^b	<i>A. taihuensis</i> ^c
Sugars				
L-Arabinose	+	v	-	+
D-Ribose	-	-	nd	-
Sucrose	+	+	-	+
D-Mannose	-	+	-	+
D-Cellobiose	-	nd	nd	+
D-Melibiose	-	nd	nd	+
Raffinose	+	nd	nd	+
L-Rhamnose	+	nd	nd	+
D-Trehalose	+	nd	nd	+
D-Mannitol	-	nd	-	-
D-Sorbitol	-	nd	nd	-
Amino acids				
L-Alanine	±	+	+	-
L-Arginine	-	v	-	-
Glutamate	±	+	+	nd
L-Proline	+	+	+	nd
L-Hydroxyproline	+	nd	-	nd
L-Lysine	-	v	-	-
Serine	±	v	+	nd
Tryptophan	-	nd	-	nd
L-Phenylalanine	-	nd	-	-
Organic acids				
Acetate	+	+	-	nd
Butyrate	-	-	nd	nd
Propionate	-	nd	-	nd
Pyruvate	-	+	+	nd
Malate	+	+	-	nd
Fumarate	+	+	-	nd
Succinate	+	+	-	nd
Citrate	-	nd	nd	-
Alcohols				
Methanol	-	v	-	nd
Ethanol	+	+	+	nd
Propanol	-	v	-	nd
Butanol	-	v	-	nd

* - All species utilized D-xylose, D-glucose, D-galactose, D-fructose, D-maltose, and lactose. ^a - Data are from Poindexter (1964); ^b - data are from Pate *et al.* (1973); ^c - data are from Liu *et al.* (2005); v – variable, nd – not determined.