

Supplementary Table 1. The isolation medium and temperature of the Ojos del Salado strains compared to the growth range and temperature optimum of the type strains, ordered by phylogenetic closeness according to Fig. 2. (The uncited type strains in the main text were excluded.)

		Ojos del Salado strains		Type strains					
Isolate/type strain name		Accession number	Isolation medium (R2A %)	Isolation temperature (°C)	Medium	Growth range (°C)	Growth optimum (°C)	Citation	
Actinobacteria	<i>Pseudarthobacter psychrotolerans</i> YJ56		NR174315			R2A	4-28	13	Shin et al. 2020
	A59-19SE-I01		OM891712	100	15				
	A59-19SE-E10		OM891695	10	10				
	Isolates from the same ARDRA group	A59-19PF-A05		1	4				
		A59-19SE-D09		1	10				
		A59-19PF-D09		1	10				
		A59-19SE-B02		10	4				
		A59-19SE-E04		10	10				
		A59-19SE-E14		10	10				
		A59-19SE-H10		10	15				
		A59-19PF-H08		10	15				
		A59-19PF-C03		100	4				
		A59-19PF-F06		100	10				
		A59-19SE-I07		100	15				
	A59-19SE-A06		OM891686	1	4				
		A59-19SE-A08		1	4				
		A59-19SE-D02		1	10				
		A59-19PF-D07		1	10				
		A59-19SE-B04		10	4				
		A59-19PF-E02		10	10				
		A59-19PF-E09		10	10				
		A59-19PF-H07		10	15				
		A59-19PF-C01		100	4				
		A59-19SE-I04		100	15				
	A59-19SE-G04A		OM891705	1	15				
		A59-19SE-A06		1	4				
		A59-19SE-G03		1	15				
		A59-19SE-B03		10	4				
		A59-19PF-E07		10	10				

	A59-19PF-H09		10	15				
	A59-19PF-C08		100	4				
	A59-19SE-I11		100	15				
	A59-19SE-F13	OM891703	100	10				
	A59-19SE-A10	OM891687	1	4				
	A59-19SE-A04		1	4				
	A59-19SE-D06		1	10				
	A59-19SE-B07		10	4				
	A59-19PF-H01		10	15				
	<i>Arthobacter psychrochitiniphilus</i> GP3	NR104702			LB	0-25	20	Wang et al. 2009
	<i>Arthobacter glacialis</i> HLT2-12-2	NR178556			PYG	4-25	20-25	Liu et al. 2019
	A59-19PF-I10	OM891726	100	15				
	A59-19PF-D02		1	10				
	A59-19PF-D13		1	10				
	A59-19PF-B06		10	4				
	A59-19PF-B07		10	4				
	A59-19PF-E03		10	10				
	A59-19PF-C05		100	4				
	A59-19PF-F09		100	10				
	A59-19PF-F01	OM891724	100	10				
	A59-19PF-C06	OM891723	100	4				
	A59-19PF-C09		100	4				
	A59-19PF-C10		100	4				
	A59-19PF-F07		100	10				
	A59-19PF-C04	OM891722	100	4				
	A59-19PF-H05		10	15				
	A59-19PF-A10	OM891719	1	4				
	A59-19PF-D04		1	10				
	A59-19PF-D12		1	10				
	A59-19PF-B02		10	4				
	A59-19SE-E09		10	10				
	A59-19SE-H04		10	15				
	A59-19PF-F08		100	10				
	A59-19SE-I12		100	15				
	A59-19PF-A01	OM891718	1	4				

	A59-19PF-D01		1	10				
	A59-19PF-D11		1	10				
	A59-19PF-B01		10	4				
	A59-19PF-B08		10	4				
	A59-19PF-H02		10	15				
	A59-19PF-C02		100	4				
	A59-19PF-C07		100	4				
	A59-19PF-F05		100	10				
	A59-19PF-F10		100	10				
A59-19SE-I14		OM891717	100	15				
	A59-19PF-D03		1	10				
	A59-19PF-D08		1	10				
	A59-19PF-B03		10	4				
	A59-19PF-B10		10	4				
	A59-19PF-E01		10	10				
	A59-19PF-E08		10	10				
	A59-19PF-H10		10	15				
	A59-19PF-F04		100	10				
<i>Pseudarthobacter siccitolerans</i> 4J27		NR108849			LB	15-37	30	Santacruz-Calvo et al. 2013
A59-19SE-G08		OM891707	1	15				
A59-19SE-F09		OM891702	100	10				
	A59-19SE-F11		100	10				
	A59-19SE-F12		100	10				
<i>Arthobacter flavus</i> CMS 19Y		NR104688			ABM	5-30	25	Reddy et al. 2000
A59-19SE-C05		OM891691	100	4				
	A59-19SE-C09		100	4				
A59-19SE-H06		OM891710	10	15				
A59-19SE-G10		OM891708	1	15				
A59-19SE-I05		OM891713	100	15				
A59-19SE-F04		OM891699	100	10				
<i>Cryobacterium soli</i> GCJ02		NR170455			LB	4-26	18	Gong et al. 2020.
<i>Cryobacterium arcticum</i> SK1		NR108605			LB	-6-28	20	Bajerski et al. 2011
<i>Cryobacterium psychrotolerans</i> 0549		NR043892			PYG	4-27	20-22	Zhang et al. 2007
<i>Cryobacterium breve</i> TMT4-23		NR170453			PYG	0-20	10-14	Liu et al. 2020
A59-19SE-B10		OM891689	10	4				

Alphaproteobacteria		A59-19SE-C01		100	4				
		A59-19SE-C08		100	4				
	A59-19SE-F02	OM891697	100	10					
		A59-19SE-F08		100	10				
	A59-19SE-F06	OM891701	100	10					
	A59-19SE-F03	OM891698	100	10					
	A59-19SE-A03	OM891685	1	4					
		A59-19SE-C03		100	4				
		A59-19SE-F10		100	10				
	<i>Salinibacterium amurskyense</i> KMM 3673		NR041932			Marine agar	4-37	25-28	Han et al. 2003
	A59-19SE-F05	OM891700	100	10					
	A59-19SE-E02	OM891693	10	10					
		A59-19SE-E06		10	10				
		A59-19SE-E13		10	10				
		A59-19SE-I09		100	15				
		A59-19SE-I10		100	15				
		A59-19PF-I04		100	15				
		A59-19PF-I07		100	15				
	A59-19PF-I08	OM891725	100	15					
		A59-19PF-I09		100	15				
	<i>Bosea vestrisii</i> 34635		NR028799			BCYE	25-37	Unknown	La Scola et al. 2003
	A59-19SE-G04B	OM891706	1	15					
	<i>Massilia jejuensis</i> 5317J-18		NR116871			R2A	5-35	30	Weon et al 2010.
	A59-19SE-I06	OM891714	100	15					
	A59-19SE-D05	OM891692	1	10					
		A59-19PF-E05		10	10				
		A59-19PF-E10		10	10				
Betaproteobacteria	<i>Massilia psychrophila</i> B1555-1		NR152080			R2A	10-25	15	Guo et al. 2016
	<i>Massilia polaris</i> RP-1-19		NR180941			R2A	4-30	10-20	Dahal et al. 2021
	A59-19SE-F01	OQ254752	100	10					
		A59-19SE-C04		100	4				
	A59-19PF-I03	OQ254753	100	15					
		A59-19SE-B09		10	4				
		A59-19SE-E03		10	10				
	A59-19SE-C02	OM891690	100	4					

Firmicutes

	A59-19SE-C10		100	4				
	A59-19SE-E12		10	10				
	A59-19SE-G02	OM891704	1	15				
	A59-19SE-D10		1	10				
	A59-19SE-E11		10	10				
	<i>Paenisporosarcina macmurdoensis</i> CMS 21w	NR025573			ABM	4-25	18-20	Reddy et al. 2003
	A59-19SE-B05	OM891688	10	4				
	A59-19SE-A01		1	4				