

## **Bacterial diversity in bentonites, engineered barrier for deep geological disposal of radioactive wastes**

### **Microbial Ecology**

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**Online Resource 5** Affiliation of the 16S rRNA gene sequences of BI-2 bacterial clones

Clone	Accession no. EMBL	no. of clones	Closest phylogenetic relative/accession no.	Similarity (%)	Isolation source
<b><i>Alphaproteobacteria</i></b>					
BI-2-12	HG970671	2	<i>Brevundimonas</i> sp. FWC04 (AJ227793)	99	-
BI-2-33	HG970672	2	<i>Rhodobacter</i> sp. J8 (KC174860)	97	wastewater treatment system
BI-2-35	HG970673	3	<i>Porphyrobacter donghaensis</i> SW-158 (AY559429)	99	sea water
BI-2-95	HG970674	2	Unc. <i>Rhodobacteraceae</i> bact. TDNP_Bbc97_260_1_68 (FJ516785)	96	biofilm
<b><i>Betaproteobacteria</i></b>					
BI-2-38	HG970675	2	Uncultured <i>Herbaspirillum</i> sp. OTUst26 (KF385227)	99	stems
BI-2-4	LK023522	1	Uncultured beta proteobacterium D9 (JF833754)	98	potassium mine soil
BI-2-15	LK023524	1	<i>Massilia</i> sp. RHLT3-10 (JX949432)	99	glacier
BI-2-19	LK023525	1	<i>Ralstonia</i> sp. A52 (KF788027)	99	red soil
BI-2-23	LK023527	1	<i>Herbaspirillum</i> sp. SCL-124 (KC455427)	94	rhizosphere of sugarcane
BI-2-36	LK023532	1	<i>Herbaspirillum</i> sp. THG-e31 (KF314195)	96	soil
BI-2-86	LK023551	1	<i>Herbaspirillum</i> sp. H6558 (KF212501)	99	sugarcane plant
BI-2-112	LK023558	1	Uncultured beta proteobacterium B-AB39 (AY622250)	94	subsurface soil
<b><i>Deltaproteobacteria</i></b>					
BI-2-11	HG970676	2	Uncultured <i>Byssovorax</i> sp. T282H11 (HM438448)	93	soil with anthracene
BI-2-51	HG970677	2	Uncultured delta proteobacterium A183 (JF833494)	92	potassium mine soil
BI-2-111	LK023557	1	Uncultured <i>Myxococcales</i> bacterium Plot18-E11 (FJ889280)	98	agricultural soil
<b><i>Gammaproteobacteria</i></b>					
BI-2-24	HG970678	2	Uncultured <i>Rhizobacter</i> sp. H16 (KF003203)	99	grass carp gut mucus
BI-2-61	HG970679	2	Uncultured bacterium AN0C1CH07 (JQ426285)	99	soil
BI-2-72	LK023544	1	<i>Lysobacter</i> sp. RCML-52 (EU833988)	99	abandoned gold mine in desert

BI-2-85	LK023550	1	<i>Xanthomonas</i> sp. 35/23 (AY571841)	100	soil with hydrocarbon
			<b><i>Bacteroidetes</i></b>		
BI-2-2	HG970666	7	<i>Flavisolibacter ginsengisoli</i> Gsoil 643 (NR_041500)	97	soil of the ginseng field
BI-2-5	HG970667	4	Uncultured <i>Bacteroidetes</i> bacterium HG-J02178 (JN409061)	95	rhizosphere soil
BI-2-67	HG970668	2	Uncultured <i>Flavisolibacter</i> sp. SGR217 (JQ793553)	98	rhizospheric soil
BI-2-26	LK023528	1	Uncultured <i>Flexibacteraceae</i> bacterium 9 (EU362138)	96	dune sand
BI-2-30	LK023529	1	Uncultured <i>Flexibacteraceae</i> bacterium 9 (EU362138)	96	dune sand
BI-2-52	LK023534	1	Uncultured <i>Bacteroidetes</i> bacterium QZ-J40 (JF776933)	99	rhizosphere soil
BI-2-55	LK023536	1	Uncultured <i>Bacteroidetes</i> bacterium HG-J02178 (JN409061)	98	rhizosphere soil of cucumber
BI-2-62	LK023538	1	<i>Pontibacter</i> sp. MDT2-9 (JX949545)	99	glacier
BI-2-64	LK023539	1	<i>Flavisolibacter</i> sp. MDT2-37 (JX949543)	99	glacier
BI-2-68	LK023540	1	Uncultured <i>Bacteroidetes</i> bacterium G1-16 (JF703303)	95	root and rhizosphere soil
BI-2-69	LK023541	1	Uncultured <i>Bacteroidetes</i> bacterium HG-J02178 (JN409061)	98	rhizosphere soil of cucumber
BI-2-71	LK023543	1	Uncultured <i>Bacteroidetes</i> bacterium HG-J01202 (JN408956)	99	rhizosphere soil of cucumber
BI-2-74	LK023546	1	Uncultured <i>Bacteroidetes</i> bacterium HG-J02178 (JN409061)	98	rhizosphere soil of cucumber
BI-2-80	LK023548	1	Uncultured <i>Pontibacter</i> sp. T102 (GQ202647)	98	soil from transgenic cotton field
BI-2-91	LK023552	1	Uncultured <i>Bacteroidetes</i> bacterium 2H9 (KC442517)	99	soil
BI-2-113	LK023559	1	Uncultured <i>Flavobacterium</i> sp. bsc41 (KC011140)	98	soil
			<b><i>Acidobacteria</i></b>		
BI-2-7	HG970669	2	Uncultured <i>Acidobacteria</i> bacterium Sliv-103 (FM877669)	98	vicinity of a uranium mine
BI-2-10	HG970670	3	Uncultured <i>Acidobacteria</i> bacterium HEG_08_216 (HQ597545)	95	grassland soil
BI-2-1	LK023520	1	Uncultured <i>Acidobacteria</i> bacterium SEG_08_419 (HQ597955)	96	grassland soil
BI-2-3	LK023521	1	Uncultured <i>Acidobacteria</i> bacterium UMAB-cl-76 (FN811260)	98	soil
BI-2-32	LK023530	1	Uncultured <i>Acidobacterium</i> sp. sw-xj59 (GQ302569)	99	cold spring sediment
BI-2-79	LK023547	1	Uncultured <i>Acidobacteria</i> bacterium HEG_08_046 (HQ597431)	99	grassland soil

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			<b><i>Chloroflexi</i></b>		
BI-2-6	HG970683	2	Uncultured <i>Caldilineaceae</i> bacterium T9222f9 (HM447656)	86	agricultural soil
BI-2-54	LK023535	2	Uncultured <i>Chloroflexi</i> bacterium IAFpp7227 (GU214149)	92	slime sample
BI-2-22	LK023526	1	Uncultured <i>Chloroflexus</i> sp. Dolo_23 (AB257647)	99	dolomite rock
BI-2-39	LK023533	1	Uncultured <i>Chloroflexi</i> bacterium AKYH948 (AY921747)	96	soil adjacent to a silage storage
			<b><i>Cyanobacteria</i></b>		
BI-2-103	HG970680	2	<i>Phormidium</i> sp. SAG 61.90 (EU624415)	97	-
BI-2-109	HG970681	2	<i>Leptolyngbya</i> sp. LLi18 (DQ786166)	93	hot stream cyanobacterial mat
BI-2-34	LK023531	1	<i>Trichocoleus sociatus</i> SAG 26.92 (EF654080)	96	marine water
			<b><i>Verrucomicrobia</i></b>		
BI-2-8	LK023523	1	Uncultured <i>Verrucomicrobia</i> bacterium g3 (EU979012)	99	soil
BI-2-70	LK023542	1	Unc. <i>Verrucomicrobia</i> bact. Cl. Alchichica (JN825628)	94	alkaline lake microbialites
BI-2-73	LK023545	1	Uncultured <i>Verrucomicrobia</i> bacterium bsc6 (KC011105)	99	soil
			<b><i>Actinobacteria</i></b>		
BI-2-84	LK023549	1	Uncultured actinobacterium PET-054 (JF344178)	99	petroleum spot on marine sediments
BI-2-101	LK023555	1	Uncultured <i>Actinomycetales</i> bacterium T501F11 (HM438032)	99	soil with anthracene
			<b><i>Planctomycetes</i></b>		
BI-2-66	HG970682	3	Uncultured <i>Gemmata</i> sp. A370 (EU283557)	98	Anderson Lake
BI-2-98	LK023553	1	<i>Gemmata</i> sp. Ha1-6 (GQ889433)	93	lawn soil
			<b><i>Armatimonadetes</i></b>		
BI-2-60	LK023537	1	Uncultured <i>Armatimonadetes</i> bacterium CO1/3c (HF566128)	97	marine deep subsurface sediments
			<b><i>Deinococcus-Thermus</i></b>		
BI-2-99	LK023554	1	Unc. <i>Thermus/Deinococcus</i> group bact. R18-435 (AY905381)	98	fallow agricultural soil

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