

Isolate Designation	GenBank Accession Number	Isolation/Enrichment		Taxonomical assignment			Growth in N-free Medium	nifH gene detected by PCR	
				Phylum	BLAST Results				
		Carbon Source	Base Medium		Taxonomy	Identity		PolF/R	IGK3/DVV
T2	MT427726	Trehalose	BG11o	Acidobacteria	<i>Edaphobacter</i> sp.	99%	+	-	-
O96	MT427708	Mixed	NFCC	Actinobacteria	<i>Aeromicrobium massiliense</i>	99%	+	-	-
CS16A	MT427679	Sucrose	Burks	Actinobacteria	<i>Aeromicrobium massiliense</i>	99%	+	-	-
A30A	MT427648	Mixed	NFCC	Actinobacteria	<i>Aeromicrobium</i> sp.	99%	+	-	-
A72B	MT427659	Mixed	NFCC	Actinobacteria	<i>Agrococcus</i> sp.	99%	+	-	-
A13	MT427645	Mixed	NFCC	Actinobacteria	<i>Arthrobacter globiformis</i>	99%	+	-	-
A67	MT427658	Mixed	NFCC	Actinobacteria	<i>Arthrobacter globiformis</i>	99%	+	-	-
O70	MT427704	Mixed	NFCC	Actinobacteria	<i>Arthrobacter globiformis</i>	98%	+	+	-
A55	MT427652	Mixed	NFCC	Actinobacteria	<i>Arthrobacter pascens</i>	99%	+	-	-
C8	MT427670	Sucrose	Burks	Actinobacteria	<i>Arthrobacter pascens</i>	99%	+	-	-
A4	MT427650	Mixed	NFCC	Actinobacteria	<i>Arthrobacter</i> sp.	99%	+	-	-
O52	MT427699	Mixed	NFCC	Actinobacteria	<i>Arthrobacter</i> sp.	99%	+	-	-
O69	MT427703	Mixed	NFCC	Actinobacteria	<i>Arthrobacter</i> sp.	99%	+	-	+
O80	MT427705	Mixed	NFCC	Actinobacteria	<i>Arthrobacter</i> sp.	99%	+	+	-
O97	MT427709	Mixed	NFCC	Actinobacteria	<i>Arthrobacter</i> sp.	99%	+	-	-
B19	MT427665	Sucrose	Burks	Actinobacteria	<i>Arthrobacter</i> sp.	99%	+	-	+
B6	MT427667	Sucrose	Burks	Actinobacteria	<i>Arthrobacter</i> sp.	99%	+	-	-
T5	MT427728	Trehalose	BG11o	Actinobacteria	<i>Arthrobacter</i> sp.	99%	+	-	+
A30B	MT427649	Mixed	NFCC	Actinobacteria	<i>Blastococcus</i> sp.	99%	+	-	-
B10	MT427661	Sucrose	Burks	Actinobacteria	<i>Cellulomonas cellasea</i>	99%	+	-	+
F1	MT427685	Glucose	Ashbeys	Actinobacteria	<i>Cellulomonas</i> sp.	100%	+	-	-
CS12	MT427675	Sucrose	Burks	Actinobacteria	<i>Cellulomonas</i> sp.	99%	+	-	-
A64	MT427657	Mixed	NFCC	Actinobacteria	<i>Frondihabitans</i> sp.	99%	+	-	-
B17	MT427664	Sucrose	Burks	Actinobacteria	<i>Geodermatophilus</i> sp.	99%	+	-	-
A62	MT427656	Mixed	NFCC	Actinobacteria	<i>Kocuria</i> sp.	99%	+	-	-
O14	MT427698	Mixed	NFCC	Actinobacteria	<i>Kocuria</i> sp.	99%	+	-	-
S11	MT427713	Sucrose	BG11o	Actinobacteria	<i>Kocuria turfanensis</i>	99%	+	-	-
PNF2	MT427711	Pseudomonas Isolation Agar	Isolation Agar	Actinobacteria	<i>Microbacterium paludicola</i>	99%	+	-	-
O110	MT427697	Mixed	NFCC	Actinobacteria	<i>Microbacterium</i> sp.	99%	+	-	-
CS10	MT427673	Sucrose	Burks	Actinobacteria	<i>Microbacterium</i> sp.	98%	+	-	-
CS14	MT427677	Sucrose	Burks	Actinobacteria	<i>Microbacterium</i> sp.	99%	+	-	-
A27	MT427647	Mixed	NFCC	Actinobacteria	<i>Modestobacter marinus</i>	99%	+	-	-
M1	MT427688	Mannitol	Ashbeys	Actinobacteria	<i>Mycobacterium</i> sp.	100%	+	-	-
CS9	MT427684	Sucrose	Burks	Actinobacteria	<i>Nocardoides</i> sp.	99%	+	-	-
S8	MT427724	Sucrose	BG11o	Actinobacteria	<i>Nocardoides</i> sp.	99%	+	+	-
A21	MT427646	Mixed	NFCC	Actinobacteria	<i>Pseudarthrobacter siccitolerans</i>	99%	+	-	-
A57	MT427653	Mixed	NFCC	Actinobacteria	<i>Pseudarthrobacter siccitolerans</i>	99%	+	-	-
A60	MT427655	Mixed	NFCC	Actinobacteria	<i>Pseudarthrobacter siccitolerans</i>	99%	+	-	-
A9	MT427660	Mixed	NFCC	Actinobacteria	<i>Pseudarthrobacter siccitolerans</i>	99%	+	-	+
O101	MT427697	Mixed	NFCC	Actinobacteria	<i>Pseudarthrobacter siccitolerans</i>	100%	+	-	-
O57	MT427700	Mixed	NFCC	Actinobacteria	<i>Pseudarthrobacter siccitolerans</i>	99%	+	-	-
A58	MT427654	Mixed	NFCC	Actinobacteria	<i>Pseudarthrobacter</i> sp.	99%	+	-	-
O109	MT427696	Mixed	NFCC	Actinobacteria	<i>Pseudarthrobacter</i> sp.	99%	+	-	-
C18	MT427669	Sucrose	Burks	Actinobacteria	<i>Pseudarthrobacter</i> sp.	99%	+	-	-
O84	MT427706	Mixed	NFCC	Actinobacteria	<i>Streptomyces cellulosae</i>	99%	+	-	+
CAN24	MT427671	Mixed	NFCC	Actinobacteria	<i>Streptomyces glaucescens</i>	100%	+	-	-
O66	MT427702	Mixed	NFCC	Actinobacteria	<i>Streptomyces glaucescens</i>	99%	+	-	-
O91	MT427707	Mixed	NFCC	Actinobacteria	<i>Streptomyces glaucescens</i>	99%	+	-	-
METH2	MT427690	Methanol	Methanol Agar	Actinobacteria	<i>Streptomyces</i> sp.	100%	+	+	-
B3	MT427666	Sucrose	Burks	Actinobacteria	<i>Streptomyces</i> sp.	99%	+	-	-
CS11	MT427674	Sucrose	Burks	Actinobacteria	<i>Tetrasphaera</i> sp.	99%	+	-	-
A5	MT427651	Mixed	NFCC	Bacteroidetes	<i>Flavobacterium</i> sp.	99%	+	-	+
T10	MT427727	Trehalose	BG11o	Bacteroidetes	<i>Nibrella saemangeumensis</i>	97%	+	-	-
F2	MT427686	Glucose	Ashbeys	Firmicutes	<i>Bacillus paralicheniformis</i>	100%	+	-	-
S16	MT427718	Sucrose	BG11o	Firmicutes	<i>Bacillus paralicheniformis</i>	99%	+	-	-
F3	MT427687	Glucose	Ashbeys	Firmicutes	<i>Bacillus</i> sp.	99%	+	-	-
O108	MT427695	Mixed	NFCC	Firmicutes	<i>Bacillus</i> sp.	99%	+	-	-
O64	MT427701	Mixed	NFCC	Firmicutes	<i>Bacillus</i> sp.	99%	+	+	-
S12	MT427714	Sucrose	BG11o	Firmicutes	<i>Bacillus</i> sp.	99%	+	-	+
S18	MT427719	Sucrose	BG11o	Firmicutes	<i>Bacillus</i> sp.	99%	+	+	+
S15	MT427717	Sucrose	BG11o	Firmicutes	<i>Paenibacillus forsythiae</i>	98%	+	+	+
S14	MT427716	Sucrose	BG11o	Firmicutes	<i>Paenibacillus sabinae</i>	98%	+	+	+
S26	MT427721	Sucrose	BG11o	Firmicutes	<i>Paenibacillus sabinae</i>	98%	+	+	+
S36	MT427722	Sucrose	BG11o	Firmicutes	<i>Paenibacillus</i> sp.	99%	+	+	+
CS13	MT427676	Sucrose	Burks	Proteobacteria	<i>Azospirillum rugosum</i>	98%	+	-	-
CS15	MT427678	Sucrose	Burks	Proteobacteria	<i>Azospirillum rugosum</i>	98%	+	-	-
BUN2	MT427668	Sucrose	Burks	Proteobacteria	<i>Escherichia coli</i>	99%	+	-	-
PMM1	MT427710	Pseudomonas Isolation Agar	Isolation Agar	Proteobacteria	<i>Labrys wisconsinensis</i>	99%	+	-	-
METH4	MT427692	Methanol	Methanol Agar	Proteobacteria	<i>Massilia</i> sp.	99%	+	-	-
B16	MT427663	Sucrose	Burks	Proteobacteria	<i>Massilia</i> sp.	99%	+	-	-
N2	MT427693	Glucose	Norris	Proteobacteria	<i>Methylorubrum</i> sp.	99%	+	-	+
METH3	MT427691	Methanol	Methanol Agar	Proteobacteria	<i>Methylorubrum extorquens</i>	99%	+	-	+
S19	MT427720	Sucrose	BG11o	Proteobacteria	<i>Microvirga</i> sp.	99%	+	-	-
B15	MT427662	Sucrose	Burks	Proteobacteria	<i>Naxibacter</i> sp.	99%	+	-	-
S4	MT427723	Sucrose	BG11o	Proteobacteria	<i>Naxibacter</i> sp.	99%	+	-	+
CS1	MT427672	Sucrose	Burks	Proteobacteria	<i>Pseudomonas</i> sp.	99%	+	-	-
CS5	MT427682	Sucrose	Burks	Proteobacteria	<i>Rhizobium</i> sp.	97%	+	-	-
CS2	MT427680	Sucrose	Burks	Proteobacteria	<i>Shinella kummerowiae</i>	99%	+	+	-
S1	MT427712	Sucrose	BG11o	Proteobacteria	<i>Ensifer</i> sp.	99%	+	-	-
CS4	MT427681	Sucrose	Burks	Proteobacteria	<i>Skermanella rubra</i>	97%	+	-	-
CS6	MT427683	Sucrose	Burks	Proteobacteria	<i>Skermanella rubra</i>	97%	+	-	-
M3	MT427689	Mannitol	Ashbeys	Proteobacteria	<i>Sphingobium yanoikuyae</i>	99%	+	-	-
S13	MT427715	Sucrose	BG11o	Proteobacteria	<i>Novosphingobium humi</i>	99%	+	+	+
S9	MT427725	Sucrose	BG11o	Proteobacteria	<i>Novosphingobium</i>				