

Isolate	Closest Relative	Acc. No.	% Identity	SpongeID	Isolation Medium
Actinomycetes					
XT125-F	<i>Arthrobacter</i> sp. M1 5-4	AY762057	100	Xt01	GA+abx
XT129	<i>Arthrobacter crystallopoietes</i>	HM163531	99	Xt01	GA+abx
XT130	<i>Arthrobacter</i> sp. MH-129	AM423148	98	Xt01	GA+abx
XT223	<i>Arthrobacter</i> sp. 8A18S61	HQ246230	100	Xt02	GA+abx
XT111	<i>Arthrobacter</i> sp. 8A18S61	HQ246230	100	Xt01	R2AV+abx
XT127	<i>Brevibacterium</i> sp. SC9	EU099382	99	Xt01	GA+abx
XT132-F	<i>Brevibacterium iodinum</i>	FJ652620	99	Xt01	GA+abx
XT212	<i>Brevibacterium iodinum</i>	FJ652620	99	Xt02	GA+abx
XT218	<i>Brevibacterium iodinum</i>	FJ652620	99	Xt02	GA+abx
XT126	<i>Microbacterium esteraromaticum</i>	FJ527721	99	Xt01	GA+abx
XT128-F	<i>Microbacterium</i> sp. JL1103	DQ985063	99	Xt01	GA+abx
XT342	<i>Microbacterium</i> sp. JJD-1	FJ765512	99	Xt03	GA+abx
XT325	<i>Microbacterium</i> sp. TSWCW21	GQ284466	99	Xt03	R2AV+abx
XT327	<i>Microbacterium</i> sp. TSWCW21	GQ284466	99	Xt03	R2AV+abx
XT339	<i>Microbacterium</i> sp. TSWCW21	GQ284466	99	Xt03	R2AV+abx
XT216	<i>Micrococcus</i> sp. MG-2010-D12	FR750272	99	Xt02	GA+abx
XT226	<i>Micrococcus</i> sp. PA-E028	FJ233852	99	Xt02	GA+abx
XT320	<i>Micrococcus</i> sp. ITCr08	FR823400	99	Xt03	R2AV+abx
XT104	<i>Verrucosisspora</i> sp. A1	EU714241	99	Xt01	R2AV+abx
XT110	<i>Micromonospora</i> sp. 16	FJ205721	98	Xt01	R2AV+abx
XT133-F	<i>Micromonospora</i> sp. 206203	EU437824	99	Xt01	R2AV+abx
XT207	<i>Micromonospora</i> sp. R1	EU714258	99	Xt02	R2AV+abx
XT301	<i>Rhodococcus equi</i> 103S	FN563149	99	Xt03	GA+abx
XT321	<i>Rhodococcus erythropolis</i>	DQ518913	99	Xt03	R2AV+abx
XT203-F	<i>Streptomyces chromofuscus</i>	FJ486284	99	Xt02	R2AV+abx
Firmicutes					
XT112	<i>Aneurinibacillus migulanus</i>	AB112723	99	Xt01	R2AV+abx
XT124	<i>Bacillus licheniformis</i>	EU071553	99	Xt01	GA+abx
XT225	<i>Bacillus altitudinis</i>	JF508373	99	Xt02	GA+abx
XT230	<i>Bacillus subtilis</i>	FR846526	99	Xt02	GA+abx
XT333-F	<i>Bacillus licheniformis</i>	FJ493045	99	Xt03	GA+abx
XT316	<i>Bacillus</i> sp. 210_50	GQ199752	99	Xt03	MA2216
XT100	<i>Bacillus altitudinis</i>	JF508373	100	Xt01	R2AV+abx
XT324	<i>Bacillus</i> sp. R-11590	AJ438301	99	Xt03	R2AV+abx
XT328	<i>Bacillus licheniformis</i>	GQ375242	99	Xt03	R2AV+abx
XT336	<i>Bacillus licheniformis</i>	GQ375242	99	Xt03	R2AV+abx
XT208	<i>Bacterium DC36(2011)</i>	HQ178963	99	Xt02	R2AV+abx
XT222	<i>Bacterium DC36(2011)</i>	HQ178963	99	Xt02	R2AV+abx
XT123	<i>Staphylococcus pasteurii</i>	FJ613579	99	Xt01	GA+abx
XT306	<i>Staphylococcus equorum</i>	HQ202869	99	Xt03	GA+abx
XT341	<i>Staphylococcus epidermidis</i>	AB617572	99	Xt03	GA+abx
XT323	<i>Staphylococcus</i> sp. SB10-23	GU595329	100	Xt03	R2AV+abx
XT326	<i>Staphylococcus equorum</i>	HQ202869	99	Xt03	R2AV+abx
XT337	<i>Staphylococcus equorum</i> subsp. equorum	FR691468	99	Xt03	R2AV+abx
Alphaproteobacteria					
XT322	<i>Lutibacterium anuloeferans</i>	EU440968	99	Xt03	R2AV+abx
XT122	<i>Alphaproteobacterium M07</i>	DQ399724	99	Xt01	GA+abx
XT335	<i>Alphaproteobacterium JE041</i>	DQ097262	100	Xt03	GA+abx
XT107	<i>Bacterium</i> 1H203	JF411464	97	Xt01	R2AV+abx
Gammaproteobacteria					
XT102	<i>Spongiobacter nickelotolerans</i>	AB205011	93	Xt01	MA2216
XT205	<i>Gammaproteobacterium MOLA 531</i>	AM990755	91	Xt02	MA2216
XT315	<i>Vibrio harveyi</i>	HM236045	99	Xt03	MA2216

Table S2. Cultured isolates from *Xestospongia testudinaria*.