Table S1. Close matches, identification, potential role (identified to closest published relatives on GenBank at the time of comparison), of the bacteria occurring in water samples collected from the three sites Harry's Bommie, Tenements, and Wistari Reef, Great Barrier Reef.

| band ID | <b>Group affiliation</b> | Family           | Closest relative | Potential role                                       |
|---------|--------------------------|------------------|------------------|--|
|         | _                        |                  | (% match)        | (isolation source)                                   |
| W1      | CFB                      | Flavobacteraceae | EU636563 (96%)   | Unknown (coral Porites sp., near fish farm effluent) |
| W2      | α-proteobacteria         | Undetermined     | EF092739 (92%)   | Unknown (marine water)                               |
| W3      | α-proteobacteria         | Undetermined     | AM911490 (98%)   | Unknown (marine water)                               |
| W4      | α-proteobacteria         | Undetermined     | AM911490 (99%)   | Unknown (marine water)                               |
| W5      | α-proteobacteria         | Undetermined     | AM911490 (100%)  | Unknown (marine water)                               |
| W6      | α-proteobacteria         | Undetermined     | EF092542 (97%)   | Unknown (marine water)                               |
| W7      | α-proteobacteria         | Rhodobacteraceae | AB262175 (99%)   | Sulphur cycling (coastal bloom)                      |
| W8      | CFB                      | Flavobacteraceae | AB294989 (100%)  | Unknown (marine water near hot spring)               |
| W9      | CFB                      | Flavobacteraceae | EU799734 (93%)   | Unknown (marine water)                               |
| W10     | CFB                      | Flavobacteraceae | FJ015075 (98%)   | Unknown (coral, Pocillopora damicornis)              |

CFB = Cytophaga-Flavobacterium-Bacteroides; band ID = DGGE band.