**TABLE S1. Determination of MIC values for selected compounds against MRSA.** MRSA was incubated with samples as described in the Experimental section.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Entry** | **AIMS Sample Code** | **Phylum** | **QCL Sample Number** | **Fraction** | **MRSA MIC****(µg mL−1)** |
| **1**  | 22565  | Porifera  | SN00739718  | Crude Extract  | 31.3 ± 1.5 |
| **2**  | 24606  | Porifera  | SN00732793  | MeOH Eluent  | 125.0 ± 4.0 |
| **3**  | 24307  | Porifera  | SN00730771  | MeOH Eluent  | 250.0 ± 2.0 |
| **4†**  | 20608  | Porifera  | SN00760947  | Crude Extract  | 31.3 ± 1.0 |
| **5**  | 25641  | Porifera  | SN00731867  | Crude Extract  | 250.0 ± 2.5 |
| **6†** | 26051  | Porifera  | SN00731005  | Crude Extract  | 62.5 ± 4.0 |
| **7**  | 25642  | Porifera  | SN00731868  | Crude Extract  | 125.0 ± 1.6 |
| **8**  | 24132  | Porifera  | SN00734102  | Crude Extract  | 125.0 ± 0.6 |
| **9**  | 19033  | Porifera  | SN00733107  | MeOH Eluent  | 62.5 ± 0.1 |
| **10†**  | 19033  | Porifera  | SN00733110  | Crude Extract  | 31.3 ± 1.0 |
| **11**  | 19039  | Porifera  | SN00733134  | Crude Extract  | 125.0 ± 2.0 |
| **12**  | 19039  | Porifera  | SN00733131  | MeOH Eluent  | 250.0 ± 0.2 |
| **13†**  | 20608  | Porifera  | SN00760956  | 75% MeOH Eluent  | 31.3 ± 0.5 |
| **14†**  | 20608  | Porifera  | SN00760958  | MeOH Eluent  | 62.5 ± 3.0 |
| **15**  | 25691  | Porifera  | SN00732374  | Crude Extract  | 125.0 ± 1.1 |
| **16†**  | 24307  | Porifera  | SN00730755  | 75% MeOH Eluent  | 31.3 ± 0.1 |
| **17**  | 24307  | Porifera  | SN00730707  | Crude Extract  | 500.0 ± 10 |
| **18**  | 25663  | Chordata  | SN00732222  | Crude Extract  | 15.6 ± 3.0 |
| **19**  | 25663  | Chordata  | SN00732228  | 75% MeOH Eluent  | 125.0 ± 1.0 |
| **20**  | 26104  | Porifera  | SN00734298  | Crude Extract  | 62.5 ± 2.0 |
| **21**  | 25658  | Porifera  | SN00732162  | Crude Extract  | 125.0 ± 1.4 |
| **22**  | 25658  | Porifera  | SN00732159  | MeOH Eluent  | 500.0 ± 1.4 |
| **23**  | 24348  | Echinodermata  | SN00739901  | 30% MeOH Eluent  | 500.0 ± 4.0 |

† Samples with promising biological activity that were subjected to further investigation.