

## Antibacterial Library

The Library has been designed with similarity search that was carried out against reference set of compounds possessing activity in treatment of pathogenic bacteria. The information about the activity has been gathered from the most reliable compound activity databases (ChEMBL, BindingDB). The final library included compounds with Tanimoto index range 0.80–0.85 against the reference set, which was selected using activity data (lower than 10  $\mu$ M) and number of compounds in the reference subsets.

The reference set included inhibitors of the following pathogenic bacteria:

*Pseudomonas aeruginosa*  
*Staphylococcus aureus subsp aureus Mu50*  
*Bacillus thermoproteolyticus*  
*Mycobacterium tuberculosis*  
*Escherichia coli*  
*Pseudomonas aeruginosa (strain ATCC 15692 / PAO1 / IC / PRS 101 / LMG12228)*  
*Streptococcus pneumoniae R6*  
*Staphylococcus aureus subsp aureus MRSA252*  
*Escherichia coli K-12*  
*Staphylococcus aureus*  
*Mycobacterium smegmatis*  
*Synechococcus elongatus (strain PCC 7942) (Anacystis nidulans R2)*  
*Streptococcus*  
*Clostridium botulinum*  
*Agrobacterium tumefaciens*  
*Spiroplasma monobiae*  
*Alicyclobacillus acidocaldarius subsp acidocaldarius (strain ATCC27009 / DSM 446 / 104-1A)*  
*(Bacillus acidocaldarius)*  
*Pseudomonas putida*  
*Bacillus anthracis*  
*Lactobacillus casei*  
*Staphylococcus epidermidis*  
*Clostridium perfringens*  
*Borrelia burgdorferi (strain ATCC 35210 / B31 / CIP 102532 / DSM4680)*  
*Staphylococcus aureus (strain N315)*  
*Vibrio harveyi*  
*Streptococcus pneumoniae serotype 2 (strain D39 / NCTC 7466)*  
*Clostridium botulinum (strain Hall / ATCC 3502 / NCTC 13319 / Type A)*  
*Thermus aquaticus*  
*Escherichia coli O26:H11 str CFSAN001629*  
*Mycobacterium tuberculosis H37Rv*  
*Stenotrophomonas maltophilia*  
*Francisella tularensis subsp tularensis (strain SCHU S4 / Schu 4)*  
*Yersinia pestis*  
*Enterococcus faecalis (strain ATCC 700802 / V583)*

More than **5,368** compounds were included into Life Chemicals' Antibacterial Library.

To download a file with compound structures for this library, please follow this link:

[http://www.lifechemicals.com/downloads/Screening\\_Libs/13056/13058](http://www.lifechemicals.com/downloads/Screening_Libs/13056/13058)