

# Biomaster efficacy

**Biomaster Antibacterial Protection has been successfully tested to the latest ISO standards on most common organisms in more than 2,000 applications. This list identifies the main strains tested and their properties.**



**Acinetobacter baumannii:** Pathogenic bacteria, resistant to most antibiotics. Can cause severe pneumonia and infections of the urinary tract, blood stream and other parts of the body.

**Aspergillus niger:** Black mould fungus. Commonly found in bathrooms. Irritant spores with mycotoxins. Pathogen, causing respiratory diseases and cutaneous and subcutaneous infections.

**Candida albicans:** Saprophytic yeast found in the nasopharynx and faeces. Causes thrush and skin infections.

**Campylobacter:** Gram negative, pathogenic bacteria, commonly found in uncooked chicken. Causes Campylobacteriosis, resulting in cramps, fever, diarrhoea and occasional death.

**Enterococcus faecalis:** Inhabits gastrointestinal tract of humans and other animals, can cause life-threatening infections in humans, especially in the nosocomial (hospital) environment.

**Enterobacter aerogenes:** Nosocomial (healthcare acquired) and pathogenic bacterium that causes opportunistic infections including most types of infections. It is generally found in the human gastrointestinal tract and does not generally cause disease in healthy individuals.

**Extended spectrum beta lactamases (ESBL):** Enzymes which have built up a form of resistance to commonly used antibiotics, such as penicillin. ESBL enzymes are produced by two different

forms of bacteria: E. coli (Escherichia coli) plus Klebsiella pneumoniae. The term ESBLs is used to refer to the types of bacteria that create ESBL enzyme.

**Escherichia coli:** Facultative anaerobic gram negative bacillus serotype, found in animal intestines and faeces. Strain O157 H7 is particularly pathogenic, causing gastroenteritis, sometimes fatal.

**Klebsiella pneumoniae:** Aerobic Gram negative bacillus, part of the normal intestinal flora of animals and humans. Pathogenic, causing hospital and community acquired infections.

**Legionella:** Gram negative, aerobic, pathogenic bacterium. Infection can lead to Legionellosis (Legionnaires Disease or Legion Fever) which can also lead to pneumonia.

**Listeria monocytogenes:** Gram positive aerobic non spore-forming bacillus, found in the intestinal tract of humans. Pathogenic if it enters the bloodstream, causing Listeriosis.

**Methicillin Resistant Staphylococcus Aureus (MRSA):** Aerobic Gram positive coccus. Part of the normal flora of the skin, intestinal and genital tracts and mucous membranes of warm blooded animals. An opportunistic pathogen causing a wide variety of infections. There are currently 27 known pathogenic serotypes of MRSA, each highly contagious and resistant to most antibiotic treatments. Common in hospital acquired infections.

**Proteus vulgaris:** Aerobic Gram negative bacillus, part of the normal human intestinal flora. Pathogenic, causing urinary tract and intestinal infections.

**Pseudomonas aeruginosa:** Aerobic Gram negative bacillus, colonies forming a characteristic blue green pigment with a urine like odour. Ubiquitous in nature. Pathogenic, being a major cause of hospital acquired infections.

**Salmonella enteritidis:** Gram negative bacillus, with over 1000 known pathogenic serotypes, causing enteric or typhoid fever in humans. Found in the gut of animals, birds, and human carriers. Infection is passed through poor hygiene.

**Salmonella typhimurium:** Can cause diarrhoea, which usually does not require antibiotic treatment. However, in people at risk (i.e. infants, small children, the elderly) Salmonella infections can become very serious, leading to complications.

**Trychophyton mentagrophytes:** Saprophytic fungus causing dermatophytosis, athlete's foot and other chronic skin infections.

**Vancomycin resistant enterococci (VRE):** Bacterial strains of the genus Enterococcus that are resistant to the antibiotic Vancomycin.

  
**Biomaster**  
Antibacterial Technology