

BIOBALL®

Available Strains List Issue 89

BIOBALL® contains a precise number of microorganisms in a water-soluble ball delivering unprecedented accuracy and precision for Quantitative Microbiological Quality Control.

BIOBALL® is a Certified Reference Material manufactured under accreditation to ISO 17034:2016.

BIOBALL® SingleShot

SingleShot - mean of between 28 and 33 cfu with a standard deviation of 3 cfu or less (unless otherwise stated).



Reference 20 vials/ 20 tests	Reference 10 vials/ 10 tests	Organism	BIOBALL Strain	Corresponding Strains	Cell Type	Shelf life from date of manufacture [^]
56022	N/A	<i>Aspergillus brasiliensis</i> ***	NCPF 2275	ATCC16404, CIP1431.83, IM1149007, NBRC9455, WDCM00053	Spore	2 Years
56023	N/A	<i>Bacillus cereus</i>	NCTC 7464	ATCC10876, NCIMB8579, NRRL569	Spore	2 Years
56024	N/A	<i>Bacillus spizizenii</i> (Previously <i>Bacillus subtilis</i> subsp. <i>spizizenii</i>)	NCTC 10400	ATCC6633, CIP52.62, NCIMB8054, NBRC3134	Spore	2 Years
56068	N/A	Blank BIOBALL (containing no microorganisms)	N/A	N/A	N/A	3 Years
N/A	414301	<i>Burkholderia cepacia</i> *	NCTC 10743	ATCC25416, DSM7288, CIP80.24	Cell	1 Year
56026	N/A	<i>Candida albicans</i> *	NCPF 3179	ATCC10231, CIP48.72, NBRC1594, WDCM00054	Cell	2 Years
56027	N/A	<i>Citrobacter freundii</i> **	NCTC 9750	ATCC8090, DSM30039, NBRC12681, CIP57.32	Cell	1 Year
56028	N/A	<i>Clostridium perfringens</i> *	NCTC 8798	CIP106157	Spore	2 Years
56029	N/A	<i>Clostridium sporogenes</i>	NCTC 12935	ATCC11437, NBRC14293, NCIMB12343, CIP100651, DSM1446	Spore	2 Years
421876	N/A	<i>Cutibacterium acnes</i> *** (Previously <i>Propionibacterium acnes</i>)	DSM 1897	ATCC6919, CIP53.117, JCM6425, KCTC3314, NCTC737	Cell	2 Years
56030	N/A	<i>Klebsiella aerogenes</i> (Previously <i>Enterobacter aerogenes</i>)	NCTC 10006	ATCC13048, DSM30053, CDC819-56	Cell	2 Years
56031	N/A	<i>Enterococcus faecalis</i>	NCTC 12697	ATCC29212, WDCM00087	Cell	2 Years
56032	N/A	<i>Enterococcus faecalis</i>	NCTC 775	ATCC19433, DSM20478, WDCM00009	Cell	2 Years
56035	N/A	<i>Escherichia coli</i> *	NCTC 12241	ATCC25922, DSM1103, NCIMB12210, WDCM00013	Cell	2 Years
56034	N/A	<i>Escherichia coli</i>	NCTC 12923	ATCC8739, NCIMB8545, CIP53.126, NBRC3972, WDCM00012	Cell	2 Years
56033	N/A	<i>Escherichia coli</i>	NCTC 9001	ATCC11775, DSM30083, CIP54.8, WDCM00090	Cell	2 Years
412690	N/A	<i>Kocuria rhizophila</i> ***	NCTC 8340	ATCC9341	Cell	2 Years
56038	N/A	<i>Listeria innocua</i>	NCTC 11288	ATCC33090, DSM20649, WDCM00017	Cell	2 Years
56039	N/A	<i>Listeria monocytogenes</i>	NCTC 11994	WDCM00019, DSM15675	Cell	2 Years
423233	N/A	<i>Methylobacterium extorquens</i> *****	NBRC 15911	ATCC BAA-2500	Starved Cell ^{^^}	2 Years
56040	N/A	<i>Pseudomonas paraeruginosa</i> * (Previously <i>Pseudomonas aeruginosa</i>)	NCTC 12924	ATCC9027, NCIMB8626, CIP82.118, NBRC13275, WDCM00026	Cell	2 Years
56041	N/A	<i>Salmonella</i> Abaetetuba	NCTC 8244	CDC4905-51	Cell	2 Years
423616	N/A	<i>Salmonella</i> Abony	NCTC 6017	NBRC100797, CIP80.39, DSM4224, WDCM00029	Cell	2 Years
56043	N/A	<i>Salmonella</i> Salford****	IMVS 1710	N/A	Cell	2 Years
56044	N/A	<i>Salmonella</i> Typhimurium	NCTC 12023	ATCC14028, DSM19587, NCIMB13284, WDCM00031	Cell	2 Years
56045	N/A	<i>Staphylococcus aureus</i> ***	NCTC 10788	ATCC6538, CIP4.83, NCIMB9518, NBRC13276, FDA209, WDCM00032	Cell	2 Years
56092	N/A	<i>Staphylococcus epidermidis</i> **	NCTC 6513	CCUG3709	Cell	2 Years
56046	N/A	<i>Streptococcus pyogenes</i>	NCTC 12696	ATCC19615, CIP1042.26	Cell	2 Years

[^]All BIOBALL strains and Re-Hydration Fluid products are shipped with a minimum of 6 months shelf life remaining.

^{^^}Starvation is performed in sterile purified water at 22 °C for 3 days following the Japanese Pharmacopoeia methodology (reference JP G8 Water 4.4.2 Media Growth Promotion Test).

*Standard deviation ≤ 3.5, ** Standard deviation ≤ 4, *** Standard deviation ≤ 4.5, ****Mean of between 40 and 60 cfu with a standard deviation of 7 cfu or less, ***** Mean of between 67 and 83 cfu with a standard deviation of ≤ 15%. Blank BIOBALL is not a "Certified Reference Material".

BIOBALL® MultiShot 550

MultiShot 550 - mean of between 500 and 600 cfu with a standard deviation $\leq 10\%$ of the mean (unless otherwise stated).



20 vials / 200 tests	Reference 10 vials / 100 tests	5 vials / 50 tests	Organism	BIOBALL Strain	Corresponding Strains	Cell Type	Shelf life from date of manufacture [^]
56011	56001	424170	<i>Aspergillus brasiliensis</i>	NCPF 2275	ATCC16404, CIP1431.83, IMI149007, NBRC9455, WDCM00053	Spore	2 Years
56012	56002	424171	<i>Bacillus spizizenii</i> (Previously <i>Bacillus subtilis</i> subsp. <i>spizizenii</i>)	NCTC 10400	ATCC6633, CIP52.62, NCIMB8054, NBRC3134	Spore	2 Years
N/A	423580	N/A	<i>Burkholderia cenocepacia</i> [#]	NCTC 13227	ATCC BAA-245, LMG16656	Cell	2 Years
423504	416589	N/A	<i>Burkholderia cepacia</i> ^{###}	NCTC 10743	ATCC25416, DSM7288, CIP80.24	Cell	2 Years
N/A	423581	N/A	<i>Burkholderia multivorans</i>	NCTC 13007	ATCC BAA-247, LMG13010, CCUG34080, CIP105495, DSM13243	Cell	2 Years
56013	56003	424172	<i>Candida albicans</i>	NCPF 3179	ATCC10231, CIP48.72, NBRC1594, WDCM00054	Cell	2 Years
56014	56004	424175	<i>Clostridium sporogenes</i>	NCTC 12935	ATCC11437, NBRC14293, NCIMB12343, CIP100651, DSM1446	Spore	2 Years
N/A	416600	N/A	<i>Cutibacterium acnes</i> (Previously <i>Propionibacterium acnes</i>)	DSM 1897	ATCC6919, CIP53.117, JCM6425, KCTC3314, NCTC737	Cell	2 Years
56015	56005	N/A	<i>Enterococcus faecalis</i>	NCTC 12697	ATCC29212, WDCM00087	Cell	2 Years
56016	56006	424176	<i>Escherichia coli</i>	NCTC 12923	ATCC8739, NCIMB8545, CIP53.126, NBRC3972, WDCM00012	Cell	2 Years
N/A	425094	424173	<i>Micrococcus luteus</i>	API 82-06-057	ATCC 700405	Cell	2 Years
56017	56007	424476	<i>Pseudomonas paraeruginosa</i> (Previously <i>Pseudomonas aeruginosa</i>)	NCTC 12924	ATCC9027, NCIMB8626, CIP82.118, NBRC13275, WDCM00026	Cell	2 Years
423617	423619	424174	<i>Salmonella</i> Abony	NCTC 6017	NBRC100797, CIP80.39, DSM4224, WDCM00029	Cell	2 Years
56019	56009	N/A	<i>Staphylococcus aureus</i>	NCTC 10788	ATCC6538, CIP4.83, NCIMB9518, NBRC13276, FDA209, WDCM00032	Cell	2 Years
N/A	423728	N/A	<i>Bacillus subtilis</i> ^{####}	CICC 10275	CMCC(B)63501	Spore	2 Years
N/A	423843	N/A	<i>Candida albicans</i> ^{####}	CICC 1965	CMCC(F)98001	Cell	2 Years
N/A	423726	N/A	<i>Escherichia coli</i> ^{####}	CICC 10389	CMCC(B)44102	Cell	2 Years
N/A	423729	N/A	<i>Staphylococcus aureus</i> ^{####}	CICC 10384	CMCC(B)26003	Cell	2 Years
N/A	423845	N/A	<i>Pseudomonas aeruginosa</i> ^{####}	CICC 10419	CMCC(B)10104	Cell	2 Years
56021	N/A	N/A	Re-Hydration Fluid	N/A	N/A	N/A	5 Years
410386	N/A	N/A	14 Day Re-Hydration Fluid	N/A	N/A	N/A	2 Years
417843	N/A	N/A	Alternative Re-Hydration Fluid	N/A	N/A	N/A	1 Year

[^]All BIOBALL strains and Re-Hydration Fluid products are shipped with a minimum of 6 months shelf life remaining.

Mean of between 450 and 650 cfu with a standard deviation $\leq 15\%$ of the mean.

Mean of between 500 and 600 cfu with a standard deviation $\leq 15\%$ of the mean.

Available only in India. Mean of between 450 and 650 cfu with a standard deviation $\leq 15\%$ of the mean.

Make-to-order. Please contact your bioMérieux Account Manager for details.

Micrococcus luteus (Ref# 425094) is not a Certified Reference Material (in progress).

BIOBALL® MultiShot 10E8

MultiShot 10E8 - mean of between 0.7 and 1.5 x 10⁸
with a standard deviation of ≤ 20% of the mean.



Reference 10 vials / 100 tests	Organism	BIOBALL Strain	Corresponding Strains	Cell Type	Shelf life from date of manufacture [^]
410106	<i>Aspergillus brasiliensis</i>	NCPF 2275	ATCC16404, CIP1431.83, IMI149007, NBRC9455, WDCM00053	Spore	2 Years
423596	<i>Bacillus subtilis</i>	NBRC 13722	ATCC19659	Spore	2 Years
418228	<i>Burkholderia cepacia</i>	NCTC 10743	ATCC25416, DSM7288, CIP80.24	Cell	2 Years
56145	<i>Candida albicans</i>	NCPF 3179	ATCC10231, CIP48.72, NBRC1594, WDCM00054	Cell	2 Years
56146	<i>Escherichia coli</i>	NCTC 12923	ATCC8739, NCIMB8545, CIP53.126, NBRC3972, WDCM00012	Cell	2 Years
56147	<i>Pseudomonas paraeruginosa</i> (Previously <i>Pseudomonas aeruginosa</i>)	NCTC 12924	ATCC9027, NCIMB8626, CIP82.118, NBRC13275, WDCM00026	Cell	2 Years
56148	<i>Staphylococcus aureus</i>	NCTC 10788	ATCC6538, CIP4.83, NCIMB9518, NBRC13276, FDA209, WDCM00032	Cell	2 Years
56021	Re-Hydration Fluid	N/A	N/A	N/A	5 Years

BIOBALL® Highdose 10K

HighDose 10K - mean of between 8,000 and 12,000 cfu
with a standard deviation of ≤ 15% of the mean.



Reference 20 vials	Reference 10 vials	Organism	BIOBALL Strain	Corresponding Strains	Cell Type	Shelf life from date of manufacture [^]
56049	413776	<i>Aspergillus brasiliensis</i>	NCPF 2275	ATCC16404, CIP1431.83, IMI149007, NBRC9455, WDCM00053	Spore	2 Years
56143	413777	<i>Bacillus spizizenii</i> (Previously <i>Bacillus subtilis</i> subsp. <i>spizizenii</i>)	NCTC 10400	ATCC6633, CIP52.62, NCIMB8054, NBRC3134	Spore	2 Years
56050	413778	<i>Candida albicans</i>	NCPF 3179	ATCC10231, CIP48.72, NBRC1594, WDCM00054	Cell	2 Years
56051	N/A	<i>Clostridium perfringens</i>	NCTC 8798	CIP106157	Spore	2 Years
56052	N/A	<i>Klebsiella aerogenes</i> (Previously <i>Enterobacter aerogenes</i>)	NCTC 10006	ATCC13048, DSM30053, CDC819-56	Cell	2 Years
56053	56160	<i>Escherichia coli</i>	NCTC 9001	ATCC11775, DSM30083, CIP54.8, WDCM00090	Cell	2 Years
56054	N/A	<i>Lactobacillus fermentum</i> [#]	NCIMB 6991	ATCC 9338	Cell	2 Years
56144	413831	<i>Pseudomonas paraeruginosa</i> (Previously <i>Pseudomonas aeruginosa</i>)	NCTC 12924	ATCC9027, NCIMB8626, CIP82.118, NBRC13275, WDCM00026	Cell	2 Years
56055	56159	<i>Staphylococcus aureus</i>	NCTC 10788	ATCC6538, CIP4.83, NCIMB9518, NBRC13276, FDA209, WDCM00032	Cell	2 Years

[^]All BIOBALL strains and Re-Hydration Fluid products are shipped with a minimum of 6 months shelf life remaining.

[#]Mean of between 7,000 and 13,000 with a standard deviation of ≤ 20% of the mean.

Strains sourced from NCTC, NCPF, NCIMB, IMVS, NBRC, DSMZ and CICC. NCTC and NCPF are a trademark of the UK Health Security Agency.

ATCC is a registered trademark of American Type Culture Collection.

BIOBALL® Mixed Kit Configurations



BIOBALL® Mixed kit for Growth Promotion Testing (GPT)

SingleShot mixed kit - Reference: 412541

MultiShot 550 mixed kit - Reference: 412540

Quantity of vials	Organism	BIOBALL strain	Corresponding Strains
2	<i>Aspergillus brasiliensis</i>	NCPF 2275	ATCC16404, CIP1431.83, IMI149007, NBRC9455, WDCM00053
2	<i>Bacillus spizizenii</i> (Previously <i>Bacillus subtilis</i> subsp. <i>spizizenii</i>)	NCTC 10400	ATCC6633, CIP52.62, NCIMB8054, NBRC3134
2	<i>Candida albicans</i>	NCPF 3179	ATCC10231, CIP48.72, NBRC1594, WDCM00054
2	<i>Escherichia coli</i>	NCTC 12923	ATCC8739, NCIMB8545, CIP53.126, NBRC3972, WDCM00012
2	<i>Pseudomonas paraeruginosa</i> (Previously <i>Pseudomonas aeruginosa</i>)	NCTC 12924	ATCC9027, NCIMB8626, CIP82.118, NBRC13275, WDCM00026
2	<i>Staphylococcus aureus</i>	NCTC 10788	ATCC6538, CIP4.83, NCIMB9518, NBRC13276, FDA209, WDCM00032

BIOBALL® Mixed kit for Sterility Assurance Testing

SingleShot mixed kit - Reference: 412646

MultiShot 550 mixed kit - Reference: 412647

Quantity of vials	Organism	BIOBALL strain	Corresponding Strains
2	<i>Aspergillus brasiliensis</i>	NCPF 2275	ATCC16404, CIP1431.83, IMI149007, NBRC9455, WDCM00053
2	<i>Bacillus spizizenii</i> (Previously <i>Bacillus subtilis</i> subsp. <i>spizizenii</i>)	NCTC 10400	ATCC6633, CIP52.62, NCIMB8054, NBRC3134
2	<i>Candida albicans</i>	NCPF 3179	ATCC10231, CIP48.72, NBRC1594, WDCM00054
2	<i>Clostridium sporogenes</i>	NCTC 12935	ATCC11437, NBRC14293, NCIMB12343, CIP100651, DSM1446
2	<i>Pseudomonas paraeruginosa</i> (Previously <i>Pseudomonas aeruginosa</i>)	NCTC 12924	ATCC9027, NCIMB8626, CIP82.118, NBRC13275, WDCM00026
2	<i>Staphylococcus aureus</i>	NCTC 10788	ATCC6538, CIP4.83, NCIMB9518, NBRC13276, FDA209, WDCM00032

BIOBALL® Mixed kit for Antimicrobial Effectiveness Testing

MultiShot 10E8 mixed kit - Reference: 56150

Quantity of vials	Organism	BIOBALL strain	Corresponding Strains
2	<i>Aspergillus brasiliensis</i>	NCPF 2275	ATCC16404, CIP1431.83, IMI149007, NBRC9455, WDCM00053
2	<i>Candida albicans</i>	NCPF 3179	ATCC10231, CIP48.72, NBRC1594, WDCM00054
2	<i>Escherichia coli</i>	NCTC 12923	ATCC8739, NCIMB8545, CIP53.126, NBRC3972, WDCM00012
2	<i>Pseudomonas paraeruginosa</i> (Previously <i>Pseudomonas aeruginosa</i>)	NCTC 12924	ATCC9027, NCIMB8626, CIP82.118, NBRC13275, WDCM00026
2	<i>Staphylococcus aureus</i>	NCTC 10788	ATCC6538, CIP4.83, NCIMB9518, NBRC13276, FDA209, WDCM00032

