



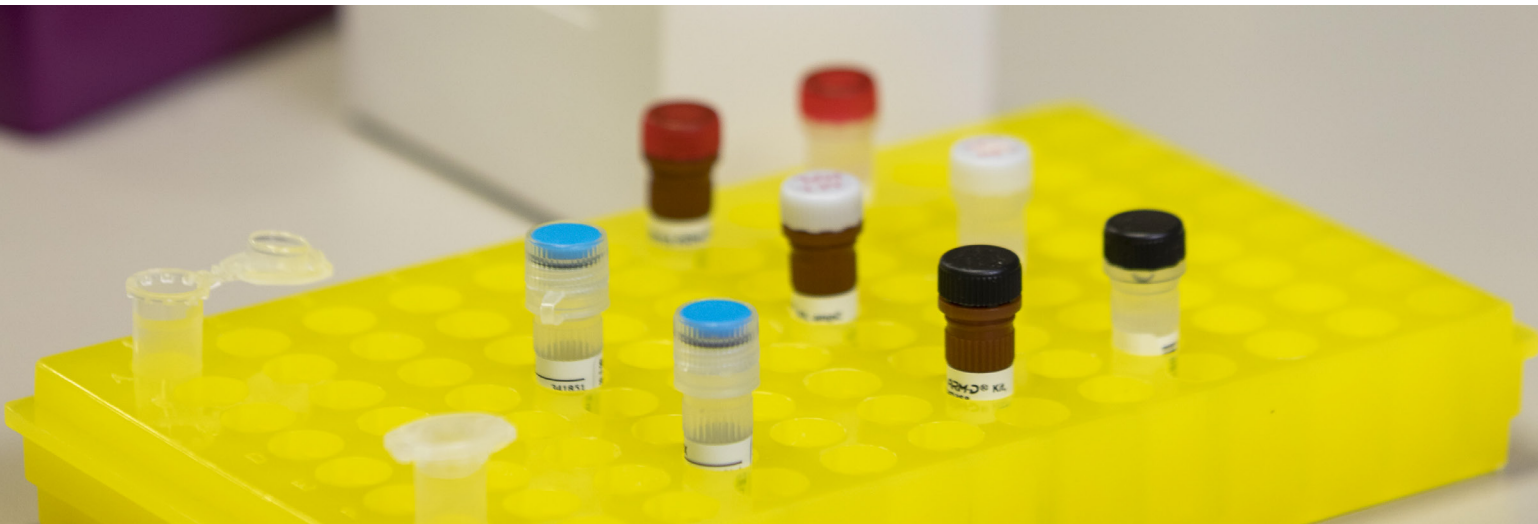
**STRECK**

streck.com



## **Streck ARM-D<sup>®</sup> Kits**

Antibiotic resistance monitoring and detection



**Streck ARM-D® Kits provide a rapid detection strategy for monitoring  $\beta$ -lactam antibiotic resistance to improve AMR surveillance in bacterial isolates and wastewater samples, aid antibiotic stewardship programs, and support infection control programs.**

### Features

- + Comprehensive, real-time PCR kits that detect gene variants not covered by cartridge-based methods.
  - Detect 24 antimicrobial resistance gene families and over 2,000 variants.
  - Test for the presence of genes encoding carbapenemases, extended-spectrum  $\beta$ -lactamases, plasmid-mediated *ampC*s and other emerging threats.
- + Includes a premixed 2X master mix: DNA Polymerase, dNTPs, MgCl<sub>2</sub> and reaction buffer.
- + Detection of targeted variants 100% concordant with WGS.
- + Compatible with most 4-channel real-time PCR Thermal Cyclers.

### Benefits

- + Protocol can be completed in less than one hour.
- + Batch testing reduces cost per sample compared to cartridge-based methods.
- + Screen bacterial isolates for AMR genes to complement phenotypic testing.
- + Ensure accurate and reliable results with a high degree of sensitivity and specificity.

**Detect over 2,000 antimicrobial resistance AMR gene variants from the following families:**

**Carbapenem-resistant *enterobacteriaceae***  
 KPC  
 NDM  
 OXA  
 VIM  
 IMP

**Extended-spectrum  $\beta$ -Lactamase**  
 CTX-M-14  
 CTX-M-15  
 TEM  
 SHV  
 GES

**Oxacillinase *ampC***  
 OXA-23  
 OXA-48  
 OXA-51  
 OXA-58  
 OXA-24-40  
 OXA-143  
 OXA-198  
 OXA-134  
 OXA-372

***ampC***  
 CMY  
 DHA  
 FOX  
 MOX  
 ACC  
 ACT/MIR (EBC)



### ARM-D® Kit, $\beta$ -Lactamase

Gene Family	Detected Variants
CMY-2 (CIT)	CMY-2, 4-7, 12-18, 20-24, 26-51, 53-69, 71-73, 75-81, 84-87, 89, 90, 94-97, 99, 102-119, 121, 122, 124, 125, 127-136, 138-156, 158, 160-178, 180, 181, 183-186, 188, 189, 191, 192, 194-198, blaBIL-1, blaLAT-1, blaLAT-3
CTX-M-14	CTX-M-9, 13, 14, 16, 17, 19, 21, 24, 27, 38, 46-51, 65, 67, 73, 81, 83-87, 90, 93, 98, 99, 102, 104, 105, 110-113, 121, 122, 125, 126, 129, 130, 140, 147, 148, 159, 161, 168, 174, 191, 192, 195, 196, 198, 201, 213-215, 219, 223, 233, 235, 239, 240-243, 247-249, 252, 255, 267, 269, 277, 278
CTX-M-15	CTX-M-1, 3, 10, 12, 15, 22, 23, 28-30, 32-34, 36, 37, 42, 52-55, 58, 60-62, 64, 66, 68-72, 79, 80, 82, 88, 96, 101, 103, 114, 116, 117, 123, 127, 132, 136, 138, 139, 142-144, 146, 150, 153-158, 162-164, 166, 167, 169, 170, 172, 173, 175-184, 186-190, 193, 194, 197, 199, 202-204, 206-212, 216, 218, 220, 222, 224-228, 230-232, 234, 236-238, 244-246, 251, 254, 256-259, 261, 264-266, 268, 271, 273-276
IMP	IMP-1-8, 10, 12-15, 17, 19, 20, 23-28, 30-35, 37-40, 42, 43, 46, 48, 50-52, 54, 55, 59-67, 69, 70, 73, 76-81, 84-92, 94-98, 101, 102, 104, 105
VIM	VIM-1-6, 8-12, 14-20, 23-46, 48-60, 62-68, 70, 72-92
OXA-48	OXA-48, 162, 163, 181, 199, 204, 232, 244, 245, 247, 252, 370, 405, 416, 438, 439, 484, 505, 514, 515, 517, 519, 546, 547, 566, 788, 793, 833, 894, 918, 920, 922-924, 929, 933, 934, 1038, 1039, 1055, 1119, 1146, 1167, 1181, 1201, 1205, 1207, 1211-1213, 1226, 1240, 1242, 1304-1309
KPC	KPC-1-19, 21-116, 118-197, 201-209, 211-218, 223-228, 230-234, 236-245
NDM	NDM-1, 16a, 16b, 17-31, 33-58, 60, 61, 64-74, 76, 78
DHA	DHA-1-7, 9, 10, 12-15, 17-29, 31-34, MOR-2

### ARM-D® Kit, *ampC*

Gene Family	Detected Variants
MOX	MOX-1-4, 8, 10, 11, 14, 16-18, 20-23, CMY-1, 8, 8b, 9-11, 19
ACC	ACC-1, 1a, 1b, 1c, 1d, 4, 8
FOX	FOX-1-5, 7-10, 12-18, 20, 21
DHA	DHA-1-7, 9, 10, 12-15, 17-29, 31-34, MOR-2
CMY-2 (CIT)	CMY-2, 4-7, 12-18, 20-39, 41-45, 47, 48, 50, 51, 53-69, 71, 72, 75-81, 84-87, 89, 90, 94-97, 99, 102-105, 107, 108, 110-114, 116-118, 121, 122, 125, 127-136, 138-156, 158 160-181, 183-186, 189, 191, 192, 195-199, blaBIL-1, blaLAT-1, blaLAT-3
MIR/ACT (EBC)	MIR-1-4, 6-25, 27, 29-31, 33-35, ACT-1-8, 10, 13-18, 20, 21, 23-25, 27, 29-33, 35, 36, 38-47, 55-58, 60, 61, 65-70, 72-75, 85, 86, 89-94, 113-116, 122, 145, 148, 151, 155, 157, 171, 173, 174, 176-179, 182-184, 186, 192, 194, ACT-GC1

### ARM-D® Kit, OXA

Gene Family	Detected Variants
OXA-143	OXA-143, 182, 231, 253, 255, 499, 649, 825, 945, 1139, 1182
OXA-48	OXA-48, 162, 163, 181, 199, 204, 232, 244, 245, 247, 252, 370, 405, 416, 438, 439, 484, 505, 514, 515, 517, 519, 546, 547, 566, 788, 793, 833, 894, 918, 920, 922-924, 929, 933, 934, 1038, 1039, 1055, 1119, 1146, 1167, 1181, 1201, 1205, 1207, 1211-1213, 1226, 1240, 1242, 1304-1309
OXA-24/40	OXA-24-26, 40, 72, 139, 160, 207, 437, 653, 897, 1040, 1081, 1225, 1303, 1322
OXA-58	OXA-58, 96, 97, 164, 397, 420, 512, 1178
OXA-51	OXA-51, 64-71, 75-80, 82-84, 86-95, 98-100, 104, 106-113, 115, 117, 120-128, 130-132, 138, 144, 148-150, 172-180, 194-197, 200-203, 206, 208, 216, 217, 219, 223, 234, 241, 242, 248-250, 254, 259-263, 312-317, 336-346, 365, 371, 374-391, 400-404, 406-414, 424-426, 429-433, 441, 442, 480, 497, 507-511, 516, 521, 523-525, 528-532, 536, 545, 554-562, 654, 680, 682-723, 733-735, 738-776, 781, 782, 797-800, 828, 829, 831, 834, 852-892, 909, 910, 916, 927, 938-940, 954, 955, 970-977, 1013, 1047, 1048, 1058-1080, 1092-1094, 1096-1098, 1109, 1117, 1118, 1121-1123, 1214, 1217-1220, 1229, 1230, 1249, 1265
OXA-23	OXA-23, 27, 49, 73, 103, 105, 133, 146, 165-171, 225, 239, 366, 398, 422, 423, 435, 440, 482, 483, 565, 657, 806-818, 893, 911, 966-969, 1095, 1216, 1221, 1223, 1236, 1241, 1325
OXA-198	OXA-198, 1056, 1057, 1186
OXA-134	OXA-134, 235-237, 276-278, 282-285, 335, 360-363, 496, 537, 646-648, 915, 991, 1005, 1110-1112, 1116
OXA-372	OXA-372, 641, 1016, 1054

### ARM-D® Kit, TEM/SHV/GES

Gene Family	Detected Variants
TEM	1-12, 15-17, 19-22, 24, 26, 28-37, 39, 40, 43, 45, 47-49, 52-55, 57, 60, 61, 63, 67, 68, 70-72, 76-116, 120-122, 125-139, 141-160, 162-164, 166-169, 171, 176-178, 181-191, 194-198, 201, 205-217, 219, 220, 224-258
SHV	1-9, 11-15, 18, 19, 24-36, 38, 40-46, 48-52, 55-57, 59-67, 69-86, 89, 92-111, 115, 116, 119-121, 128, 129, 132-135, 137, 141-165, 168, 171-173, 175, 178-180, 182, 183, 185-189, 190, 191, 193-232, 234-245
GES	1-22, 24-37, 39-52, 54-62, 65, 66

## “Excellent choice to detect β-lactamase-production strains in a molecular laboratory.”

Rating: 5.0 ★★★★★

**Application Area:** Molecular Laboratory

“We have been using the ARM-D Kit, β-lactamase for a few years in our lab. The kit is ready to use and contains all the reagents necessary for the test, including the controls. The procedure and results analysis are simple and straightforward. The test is fast, reliable and, overall, it represents an excellent choice to detect and identify beta-lactamase-production bacteria strains in a molecular laboratory.”

**Review date:** 23 Jun 2021 | **ARM-D Kit, β-Lactamase**

### Ordering Information

Description	Catalog Number
Streck ARM-D® Kit, <i>ampC</i> RUO	250044
Streck ARM-D Kit, <i>ampC</i> CE	250046
Streck ARM-D Kit, β-Lactamase RUO	250045
Streck ARM-D Kit, β-Lactamase CE	250047
Streck ARM-D Kit, OXA RUO	250052
Streck ARM-D Kit, OXA CE	250055
Streck ARM-D Kit, TEM/SHV/GES RUO	250054
Streck ARM-D Kit, TEM/SHV/GES CE	250057

Streck ARM-D Kits (RUO) are for Research Use Only.  
 Not for use in diagnostic procedures.  
 CE versions of these kits are also available.

#### International Sales

402.333.1982  
 international@streck.com

#### Domestic Sales

800.843.0912  
 domesticsales@streck.com

#### Customer Service

800.228.6090  
 custserv@streck.com

#### Technical Services

402.691.7510  
 800.843.0912  
 Fax: 402.691.7518  
 technicalservices@streck.com

