Figure 1

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TEM-59          HPETLVKVKDAEDKLGARVGYIELDLNSGKILESFRPEERFPMMSTFKVLLCGAVLSRVD 60
TEM-89          HPETLVKVKDAEDKLGARVGYIELDLNSGKILESFRPEERFPMMSTFKVLLCGAVLSRVD 60
TEM-151         HPETLVKVKDAEDQLGARVGYIELDLNSGKILESFRPEERFPMVSTFKVLLCGAVLSRVD 60
TEM-152         HPETLVKVKDAEDQLGARVGYIELDLNSGKILESFRPEERFPMVSTFKVLLCGAVLSRVD 60
TEM-36          HPETLVKVKDAEDQLGARVGYIELDLNSGKILESFRPEERFPMVSTFKVLLCGAVLSRVD 60
TEM-39          HPETLVKVKDAEDQLGARVGYIELDLNSGKILESFRPEERFPMLSTFKVLLCGAVLSRVD 60
TEM-125         HPETLVKVKDAEDQLGARVGYIELDLNSGKILESFRPEERFPMLSTFKVLLCGAVLSRVD 60
TEM-158         HPETLVKVKDAEDQLGARVGYIELDLNSGKILESFRPEERFPMLSTFKVLLCGAVLSRVD 60
TEM-80          HPETLVKVKDAEDQLGARVGYIELDLNSGKILESFRPEERFPMLSTFKVLLCGAVLSRVD 60
TEM-32          HPETLVKVKDAEDQLGARVGYIELDLNSGKILESFRPEERFPMISTFKVLLCGAVLSRVD 60
TEM-34          HPETLVKVKDAEDQLGARVGYIELDLNSGKILESFRPEERFPMVSTFKVLLCGAVLSRVD 60
TEM-33          HPETLVKVKDAEDQLGARVGYIELDLNSGKILESFRPEERFPMLSTFKVLLCGAVLSRVD 60
TEM-109         HPETLVKVKDAEDQLGARVGYIELDLNSGKILESFRPEERFPMLSTFKVLLCGAVLSRVD 60
TEM-68          HPETLVKVKDAEDQLGARVGYIELDLNSGKILESFRPEERFPMMSTFKVLLCGAVLSRVD 60
TEM-121         HPETLVKVKDAEDKLGARVGYIELDLNSGKILESFRPEERFPMMSTFKVLLCGAVLSRVD 60
                ************:******************************:*****************

TEM-59          AGQEQLGRRIHYSQNDLVEYSPVTEKHLTDGMTVRELCSAAITMGDNTAANLLLTTIGGP 120
TEM-89          AGQEQLGRRIHYSQNDLVKYSPVTEKHLTDGMTVRELCSAAITMGDNTAANLLLTTIGGP 120
TEM-151         AGQEQLGRRIHYSQNDLVEYSPVTEKHLTDGMTVRELCSAAITMSDNTAANLLLTTIGGP 120
TEM-152         AGQEQLGRRIHYSQNDLVEYSPVTEKHLTDGMTVRELCSAAITMSDNTAANLLLTTIGGP 120
TEM-36          AGQEQLGRRIHYSQNDLVEYSPVTEKHLTDGMTVRELCSAAITMSDNTAANLLLTTIGGP 120
TEM-39          AGQEQLGRRIHYSQNDLVEYSPVTEKHLTDGMTVRELCSAAITMSDNTAANLLLTTIGGP 120
TEM-125         AGQEQLGRRIHYSQNDLVEYSPVTEKHLTDGMTVRELCSAAITMSDNTAANLLLTTIGGP 120
TEM-158         AGQEQLGRRIHYSQNDLVEYSPVTEKHLTDGMTVRELCSAAITMSDNTAANLLLTTIGGP 120
TEM-80          AGQEQLGRRIHYSQNDLVEYSPVTEKHLTDGMTVRELCSAAVTMSDNTAANLLLTTIGGP 120
TEM-32          AGQEQLGRRIHYSQNDLVEYSPVTEKHLTDGMTVRELCSAAITMSDNTAANLLLTTIGGP 120
TEM-34          AGQEQLGRRIHYSQNDLVEYSPVTEKHLTDGMTVRELCSAAITMSDNTAANLLLTTIGGP 120
TEM-33          AGQEQLGRRIHYSQNDLVEYSPVTEKHLTDGMTVRELCSAAITMSDNTAANLLLTTIGGP 120
TEM-109         AGQEQLGRRIHYSQNDLVKYSPVTEKHLTDGMTVRELCSAAITMSDNTAANLLLTTIGGP 120
TEM-68          AGQEQLGRRIHYSQNDLVEYSPVTEKHLTDGMTVRELCSAAITMSDNTAANLLLTTIGGP 120
TEM-121         AGQEQLGRRIHYSQNDLVKYSPVTEKHLTDGMTVRELCSAAITMSDNTAANLLLTTIGGP 120
                ******************:**********************.**.***************

TEM-59          KELTAFLHNMGDHVTRLDRWEPELNEAIPNDERDTTMPAAMATTLRKLLTGELLTLASRQ 180
TEM-89          KELTAFLHNMGDHVTRLDRWEPELNEAIPNDERDTTMPAAMATTLRKLLTGELLTLASRQ 180
TEM-151         KELTAFLHNMGDHVTRLDHWEPELNEAIPNDERDTTMPAAMATTLRKLLTGELLTLASRQ 180
TEM-152         KELTAFLHNMGDHVTRLDHWEPELNEAIPNDERDTTMPAAMATTLRKLLTGELLTLASRQ 180
TEM-36          KELTAFLHNMGDHVTRLDRWEPELNEAIPNDERDTTMPAAMATTLRKLLTGELLTLASRQ 180
TEM-39          KELTAFLHNMGDHVTRLDRREPELNEAIPNDERDTTMPAAMATTLRKLLTGELLTLASRQ 180
TEM-125         KELTAFLHNMGDHVTRLDSREPELNEAIPNDERDTTMPAAMATTLRKLLTGELLTLASRQ 180
TEM-158         KELTAFLHNMGDHVTRLDSWEPELNEAIPNDERDTTMPAAMATTLRKLLTGELLTLASRQ 180
TEM-80          KELTAFLHNMGDHVTRLDRWEPELNEAIPNDERDTTMPAAMATTLRKLLTGELLTLASRQ 180
TEM-32          KELTAFLHNMGDHVTRLDRWEPELNEAIPNDERDTTTPAAMATTLRKLLTGELLTLASRQ 180
TEM-34          KELTAFLHNMGDHVTRLDRWEPELNEAIPNDERDTTMPAAMATTLRKLLTGELLTLASRQ 180
TEM-33          KELTAFLHNMGDHVTRLDRWEPELNEAIPNDERDTTMPAAMATTLRKLLTGELLTLASRQ 180
TEM-109         KELTAFLHNMGDHVTRLDHWEPELNEAIPNDERDTTMPAAMATTLRKLLTGELLTLASRQ 180
TEM-68          KELTAFLHNMGDHVTRLDRWEPELNEAIPNDERDTTMPAAMATTLRKLLTGELLTLASRQ 180
TEM-121         KELTAFLHNMGDHVTRLDSWEPELNEAIPNDERDTTMPAAMATTLRKLLTGELLTLASRQ 180
                ****************** ***************** ************************

TEM-59          QLIDWMEADKVAGPLLRSALPAGWFIADKSGAGERGSRGIIAALGPDGKPSRIVVIYTTG 240
TEM-89          QLIDWMEADKVAGPLLRSALPAGWFIADKSGASERGSRGIIAALGPDGKPSRIVVIYTTG 240
TEM-151         QLIDWMEADKVAGPLLRSALPAGWFIADKSGAGERGSRGIIAALGPDGKPSRIVVIYTTG 240
TEM-152         QLIDWMEADKVAGPLLRSALPAGWFIADKSGAGKRGSRGIIAALGPDGKPSRIVVIYTTG 240
TEM-36          QLIDWMEADKVAGPLLRSALPAGWFIADKSGAGERGSRGIIAALGPDGKPSRIVVIYTTG 240
TEM-39          QLIDWMEADKVAGPLLRSALPAGWFIADKSGAGERGSRGIIAALGPDGKPSRIVVIYTTG 240
TEM-125         QLIDWMEADKVAGPLLRSALPAGWFIADKSGAGERGSRGIIAALGPDGKPSRIVVIYTTG 240
TEM-158         QLIDWMEADKVAGPLLRSALPAGWFIADKSGAGERGSRGIIAALGPDGKPSRIVVIYTTG 240
TEM-80          QLIDWMEADKVAGPLLRSALPAGWFIADKSGAGERGSRGIIAALGPDGKPSRIVVIYTTG 240
TEM-32          QLIDWMEADKVAGPLLRSALPAGWFIADKSGAGERGSRGIIAALGPDGKPSRIVVIYTTG 240
TEM-34          QLIDWMEADKVAGPLLRSALPAGWFIADKSGAGERGSRGIIAALGPDGKPSRIVVIYTTG 240
TEM-33          QLIDWMEADKVAGPLLRSALPAGWFIADKSGAGERGSRGIIAALGPDGKPSRIVVIYTTG 240
TEM-109         QLIDWMEADKVAGPLLRSALPAGWFIADKSGAGERGSRGIIAALGPDGKPSRIVVIYTTG 240
TEM-68          QLIDWMEADKVAGPLLRSALPAGWFIADKSGASKRGSRGIIAALGPDGKPSRIVVIYMTG 240
TEM-121         QLIDWMEADKVAGPLLRSALPAGWFIADKSGTGKRGSSGIIAALGPDGKPSRIVVIYTTG 240
                ********************************:.:*** ******************** **

TEM-59          SQATMDERNRQIAEIGASLIKHW 263
TEM-89          SQATMDERNRQIAEI-------- 255
TEM-151         SQATMDERDRQIAEIGGSLIKHW 263
TEM-152         SQATMDERDRQIAEIGASLIKHW 263
TEM-36          SQATMDERDRQIAEIGASLIKHW 263
TEM-39          SQATMDERDRQIAEIGASLIKHW 263
TEM-125         SQATMDERDRQIAEIGASLIKHW 263
TEM-158         SQATMDERDRQIAEIGASLIKHW 263
TEM-80          SQATMDERDRQIAEIGASLIKHW 263
TEM-32          SQATMDERNRQIAEIGASLIKHW 263
TEM-34          SQATMDERNRQIAEIGASLIKHW 263
TEM-33          SQATMDERNRQIAEIGASLIKHW 263
TEM-109         SQATMDERNRQIAEIGASLIKHW 263
TEM-68          SQATMDELNRQIAEIGASLIKHW 263
TEM-121         SQATMDERNRQIAEIGASLIKHW 263
                ******* :*******
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Figure 2

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CTX-M-14        QTSAVQQKLAALEKSSGGRLGVALIDTADNTQVLYRGDERFPMCSTSKVMAAAAVLKQSE 60
CTX-M-19        QTSAVQQKLAALEKSSGGRLGVALIDTADNTQVLYRGDERFPMCSTSKVMAAAAVLKQSE 60
CTX-M-18        QTSAVQQKLAALEKSSGGRLGVALIDTADNTQVLYRGDERFPMCSTSKVMAAAAVLKQSE 60
CTX-M-9         QTSAVQQKLAALEKSSGGRLGVALIDTADNTQVLYRGDERFPMCSTSKVMAAAAVLKQSE 60
CTX-M-16        QTSAVQQKLAALEKSSGGRLGVALIDTADNTQVLYRGDERFPMCSTSKVMAAAAVLKQSE 60
CTX-M-1         QTADVQQKLAELERQSGGRLGVALINTADNSQILYRADERFAMCSTSKVMAVAAVLKKSE 60
CTX-M-3         QTADVQQKLAELERQSGGRLGVALINTADNSQILYRADERFAMCSTSKVMAAAAVLKKSE 60
                **: ****** **:.**********:****:*:***.****.*********.*****:**

CTX-M-14        TQKQLLNQPVEIKPADLVNYNPIAEKHVNGTMTLAELSAAALQYSDNTAMNKLIAQLGGP 120
CTX-M-19        TQKQLLNQPVEIKPADLVNYNPIAEKHVNGTMTLAELSAAALQYSDNTAMNKLIAQLGGP 120
CTX-M-18        TQKQLLNQPVEIKPADLVNYNPIAEKHVNGTMTLAELSAAALQYSDNTAMNKLIAQLGGP 120
CTX-M-9         TQKQLLNQPVEIKPADLVNYNPIAEKHVNGTMTLAELSAAALQYSDNTAMNKLIAQLGGP 120
CTX-M-16        TQKQLLNQPVEIKPADLVNYNPIAEKHVNGTMTLAELSAAALQYSDNTAMNKLIAQLGGP 120
CTX-M-1         SEPNLLNQRVEIKKSDLVNYNPIAEKHVDGTMSLAELSAAALQYSDNVAMNKLISHVGGP 120
CTX-M-3         SEPNLLNQRVEIKKSDLVNYNPIAEKHVNGTMSLAELSAAALQYSDNVAMNKLIAHVGGP 120
                :: :**** **** :*************:***:**************.******:::***

CTX-M-14        GGVTAFARAIGDETFRLDRTEPTLNTAIPGDPRDTTTPRAMAQTLRQLTLGHALGETQRA 180
CTX-M-19        GGVTAFARAIGDETFRLDRTESTLNTAIPGDPRDTTTPRAMAQTLRQLTLGHALGETQRA 180
CTX-M-18        GGVTAFARAIGDETFRLDRTEPTLNTAIPGDPRDTTTPRAMAQTLRQLTLGHALGETQRA 180
CTX-M-9         GGVTAFARAIGDETFRLDRTEPTLNTAIPGDPRDTTTPRAMAQTLRQLTLGHALGETQRA 180
CTX-M-16        GGVTAFARAIGDETFRLDRTEPTLNTAIPGDPRDTTTPRAMAQTLRQLTLGHALGETQRA 180
CTX-M-1         ASVTAFARQLGDETFRLDRTEPTLNTAIPGDPRDTTSPRAMAQTLRNLTLGKALGDSQRA 180
CTX-M-3         ASVTAFARQLGDETFRLDRTEPTLNTAIPGDPRDTTSPRAMAQTLRNLTLGKALGDSQRA 180
                ..****** :***********.**************:*********:****:***::***

CTX-M-14        QLVTWLKGNTTGAASIRAGLPTSWTVGDKTGSGDYGTTNDIAVIWPQGRAPLVLVTYFTQ 240
CTX-M-19        QLVTWLKGNTTGAASIRAGLPTSWTVGDKTGSGDYGTTNDIAVIWPQGRAPLVLVTYFTQ 240
CTX-M-18        QLVTWLKGNTTGAASIRAGLPTSWTVGDKTGSGDYGTTNDIAVIWPQGRAPLVLVTYFTQ 240
CTX-M-9         QLVTWLKGNTTGAASIRAGLPTSWTAGDKTGSGDYGTTNDIAVIWPQGRAPLVLVTYFTQ 240
CTX-M-16        QLVTWLKGNTTGAASIRAGLPTSWTAGDKTGSGGYGTTNDIAVIWPQGRAPLVLVTYFTQ 240
CTX-M-1         QLVTWMKGNTTGAASIQAGLPASWVVGDKTGSGDYGTTNDIAVIWPKDRAPLILVTYFTQ 240
CTX-M-3         QLVTWMKGNTTGAASIQAGLPASWVVGDKTGSGDYGTTNDIAVIWPKDRAPLILVTYFTQ 240
                *****:**********:****:**..*******.************:.****:*******

CTX-M-14        PQQNAESRRDVLASAARIIAEGL 263
CTX-M-19        PQQNAESRRDVLASAARIIAEGL 263
CTX-M-18        PQQNAESRRDVLASAARIIAEGL 263
CTX-M-9         PQQNAESRRDVLASAARIIAEGL 263
CTX-M-16        PQQNAESRRDVLASAARIIAEGL 263
CTX-M-1         PQPKAESRRDVLASAAKIVTNGL 263
CTX-M-3         PQPKAESRRDVLASAAKIVTDGL 263
                ** :************:*:::**
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Figure 3

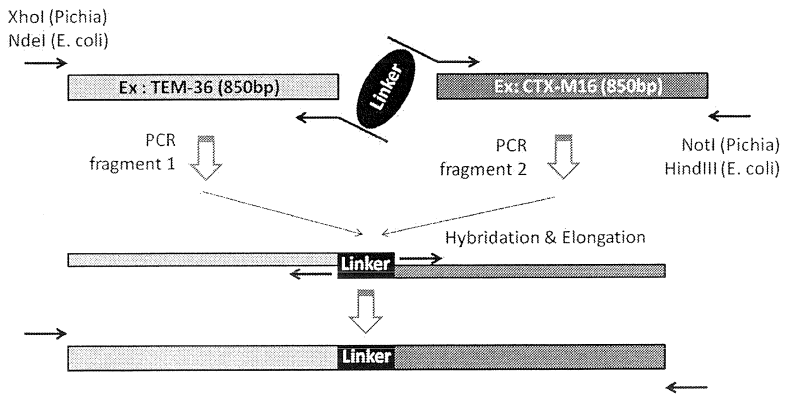


Figure 4

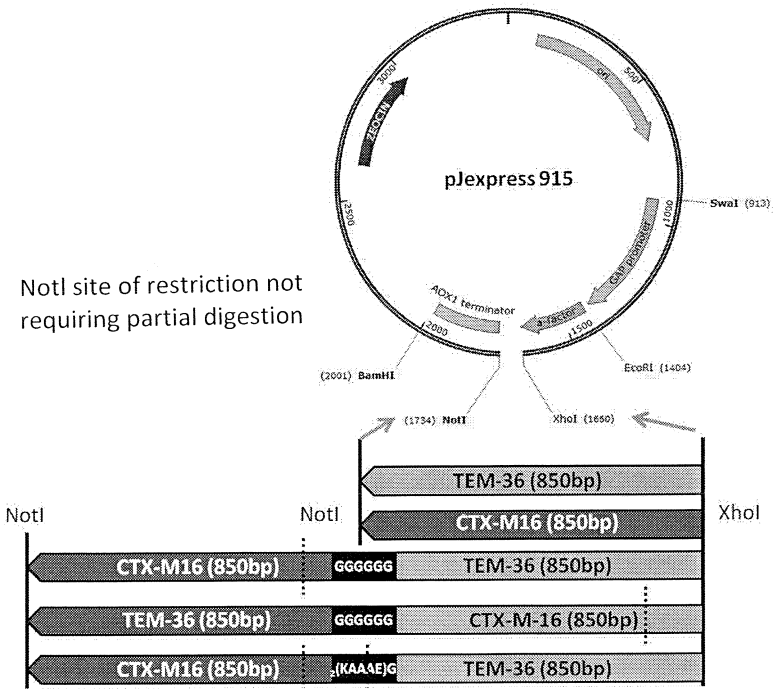
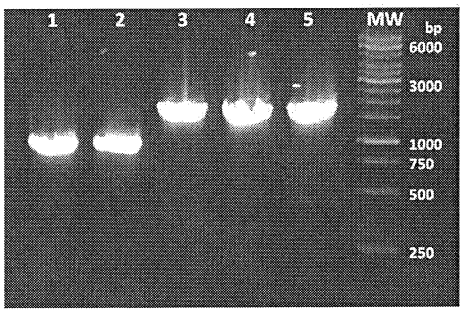


Figure 5



1- TEM36	(850bp)
2- CTXM16	(850bp)
3- TEM36-G_6-CTXM16	(1700bp)
4- CTXM16-G_6-TEM36	(1700bp)
5- TEM36-G$(EAAAK)_2$-CTXM16	(1700bp)

Figure 6

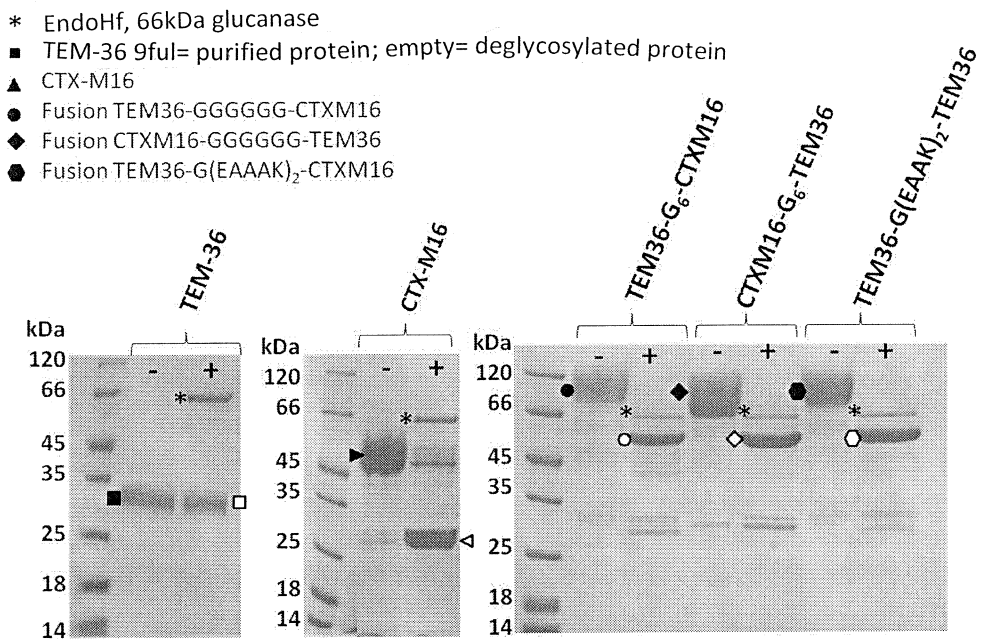


Figure 7

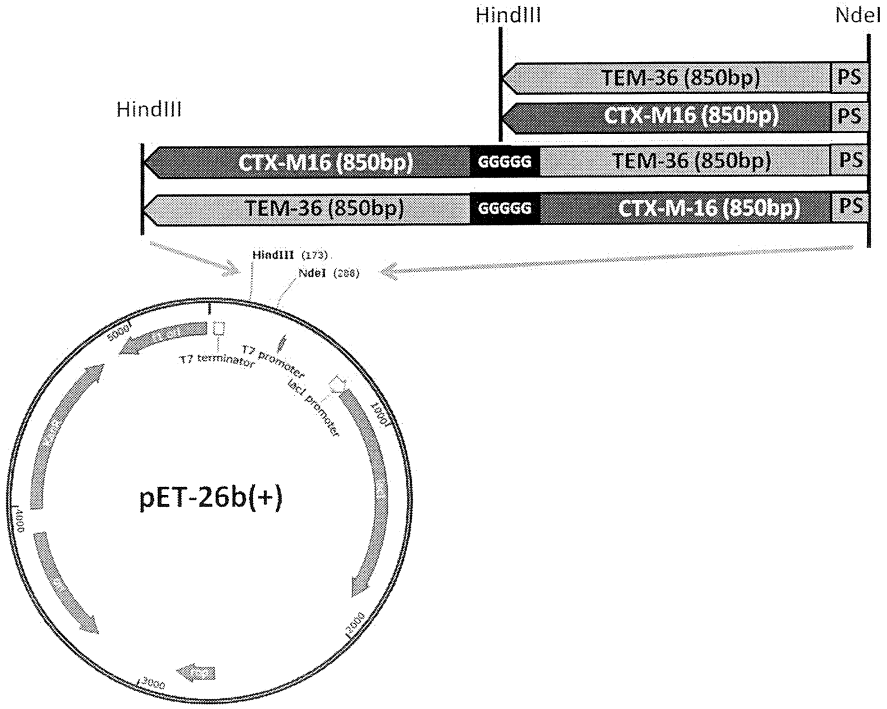
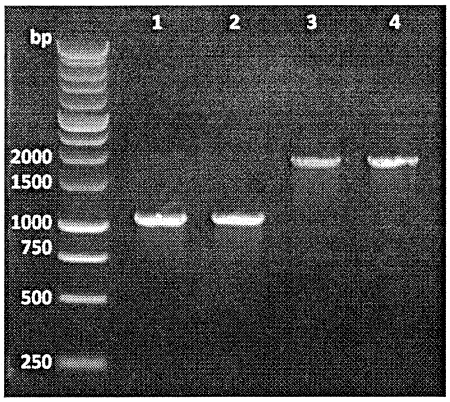
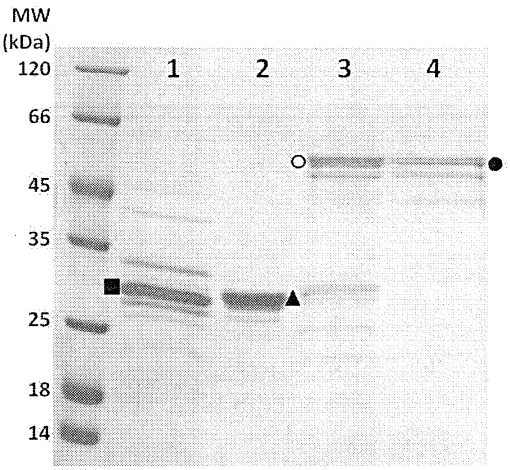


Figure 8



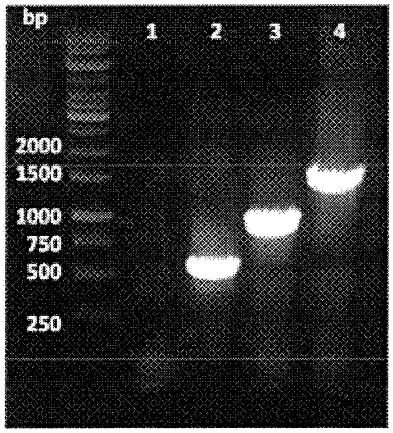
1- TEM36 (1100bp)
2- CTXM16 (1100bp)
3- TEM36-G_6-CTXM16 (2000bp)
4- CTXM16-G_6-TEM36 (2000bp)

Figure 9



1- CTXM16 ■
2- TEM36 ▲
3- CTXM16-G_5-TEM36 ○
4- TEM36-G_5-CTXM16 ●

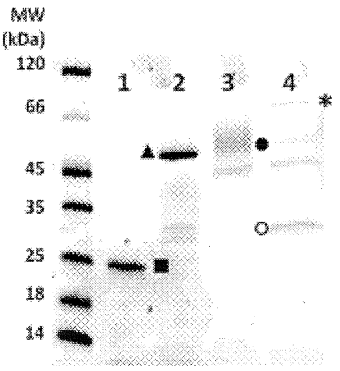
Figure 10



1- Contrôle Négatif PCR
2- AAC-6'-Ib-cr (600bp)
2- CTXM16 (9000bp)
3- AAC-H_5-CTXM16 (1500bp)

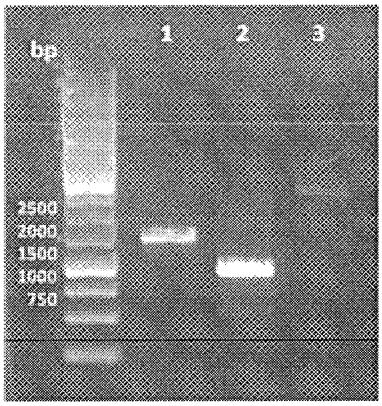
Negative PCR control

Figure 11



1- AAC-6'-Ib-cr ■
2- AAC-6H-CTXM16 ▲
3- CTXM16 ●
4- CTXM16 ○ + EndoHf *

Figure 12



1- EreB (1500bp)
2- TEM-36 (1000bp)
3- EreB-6H-TEM36 (2500bp)