



1997; 2004; 2008; 2012; 2014; 2016).

2011).

2011; 2015).

2015).

1997; 1999; 2003; 2010; 2012; 2013; 2014; 2015).

1997; 2004; 2007; 2008; 1998).

1)

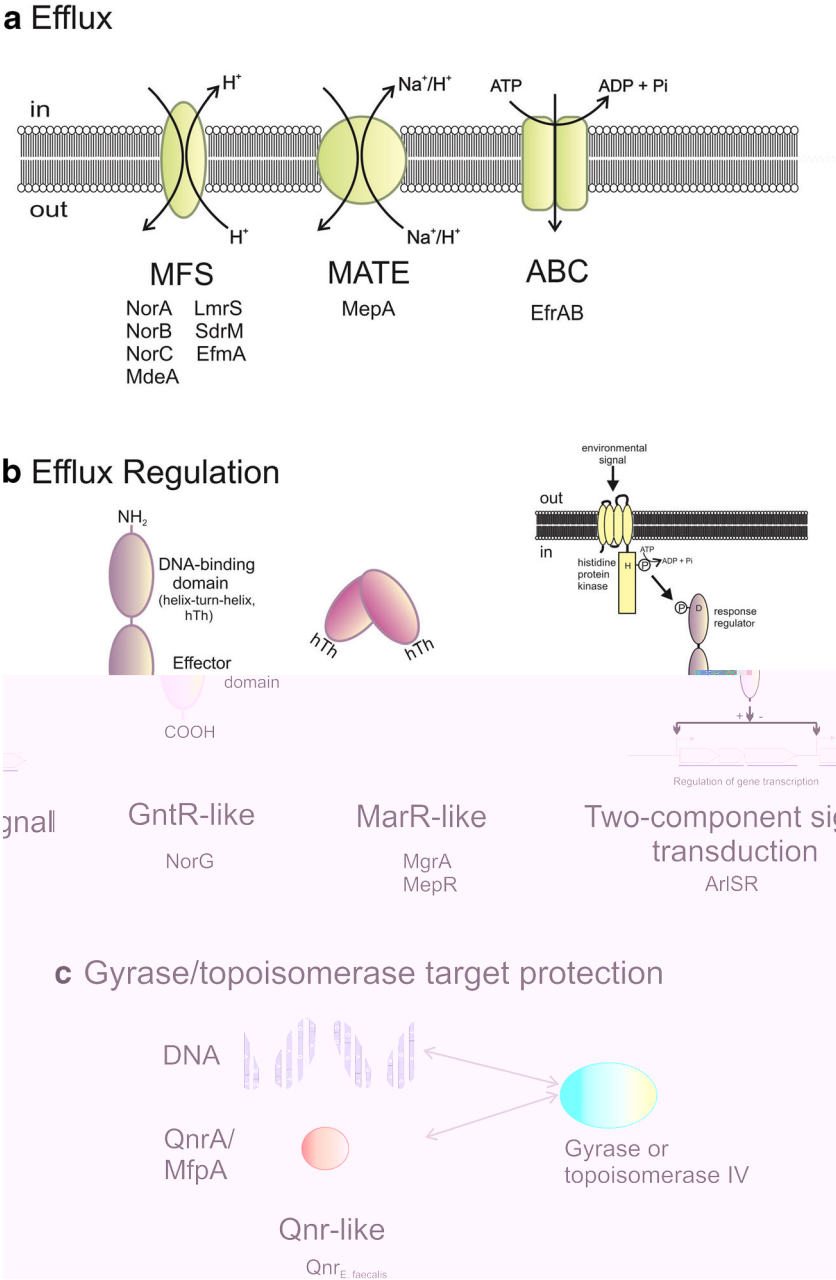
The sensitive cellular targets

[illegible]

7

[illegible]

Fig. 2



... 2009; ... 2012; ... 2005; ... 2017).

‘AMR nanomachine’

Glycopeptides

... (V ... 2011).

[illegible]

The sensitive cellular targets

2005; 2014; 2016). 1970, *Staphylococcus aureus*. (1) (2) 2006; 2006). 25–40 μ m 15–20 μ m 2002; 2006; 2006; 2009; 2013; 2016). 2.5–5.0 (2006). Q R E L R Q f v 19 μ m (<20% v)

2017⁷).

2017⁷).

3).

1971; 1989; 2005; 2017⁷

2013).

1994).

1994; 1998).

2009).

2009).

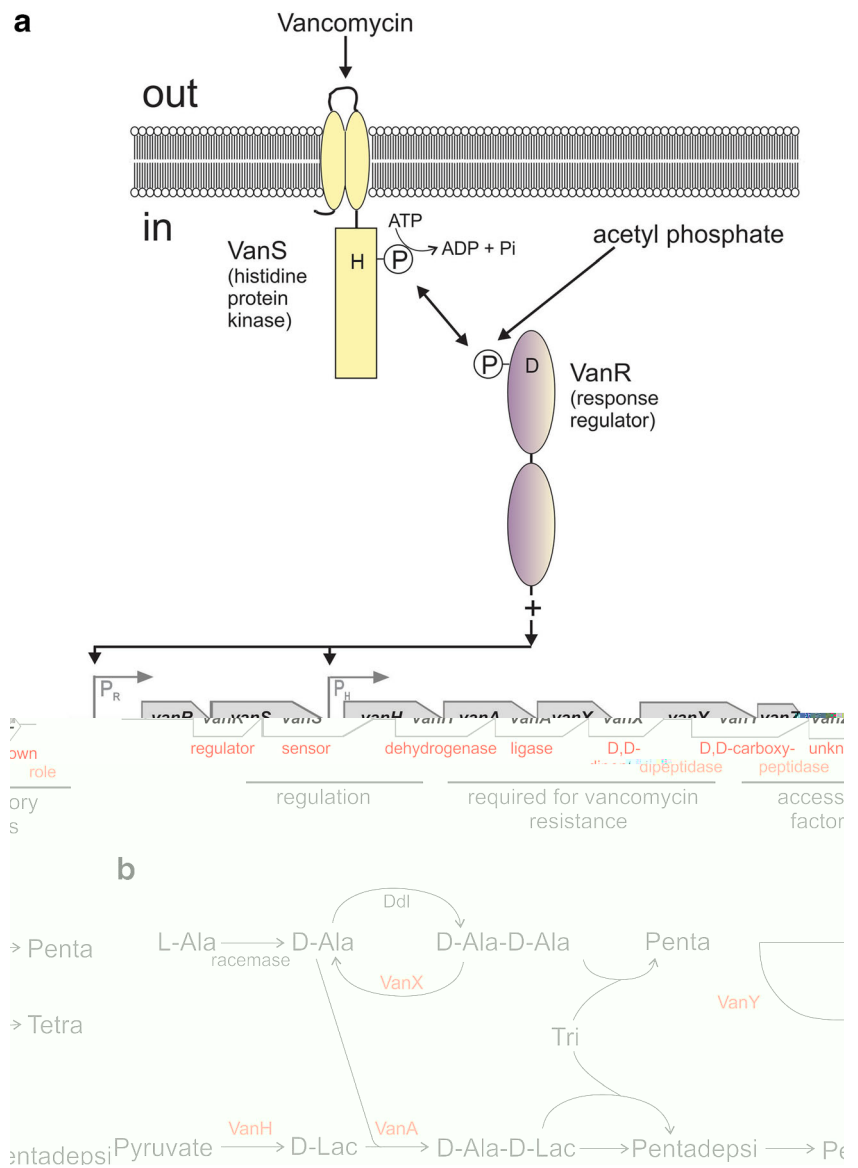
1995; 1997).

Resistance determinants

1988 (1988; *Staphylococcus aureus* (1988; 2002). 2001; 2002; 2005; 2000; 2008; 2009).

(*S. aureus* vanX) (*S. aureus* vanZ) (*S. aureus* 1546) (*S. aureus* 2006; 2007). (*S. aureus* 2004; 2010) (*S. aureus* 2017). (*S. aureus* 2014; 2016). (*S. aureus* 1997) (*S. aureus* 1997). (*S. aureus* 2001). (*S. aureus* 2013 2014) (*S. aureus* 2013). (*S. aureus* 2000).

Fig. 4



- 41:4628–4639
- (2012) *Bacillus anthracis*
- 51:370–381
- (2000) 14:307–313
- (1995) *Enterococcus faecium*
- 132:107–114
- (2016) 60:2601–2609
- (2001) 7:337–353
- (2003) 51(1):1–11
- (2005) 41(2):113–119
- (2007) *Enterococcus faecalis*
- 51:3254–3258
- (1999) 145:1849–1858
- (1997) 1546
- 179:97–106
- (1992) *Enterococcus faecium*
- 174:2582–2591
- (1996) *Enterococcus faecalis*
- 40:2291–2295
- (1997) 25:93–105
- (2008) 19:260–265
- (1997) 9(3):29–37
- (2000) 3:303–311
- (2017) 38:663–669
- (2010) 466:935–940
- (1995) 39:781–785
- (2004) 101:13285–13290
- (1997) 12106–12111
- (2000) *tcdR-tcdA-tcdB*
- 1523:135–139
- (2013) 69:1138–1149
- (2014) 42:5314–5321
- (2011) 66:551–559
- (2004) 294:479–486
- (2006) 42:25–34
- (1999) *Enterobacter cloacae*
- 38:10256–10261
- (2006) *Staphylococcus aureus*
- 50:428–438
- (2008) 3:4036
- (2007) *Staphylococcus aureus*
- 51:3235–3239
- (2007) 20:79–114
- (2008) *Staphylococcus aureus*
- 190:7123–7129
- (2009) 9:981–998
- (2008) 52:385–392
- (2014) 71:6407–6409
- (2009) 2:40–61
- (2012) 25:661–681
- (2010) 71:6407–6409

- Staphylococcus aureus*. 54:5406–5412
- (2000) *Staphylococcus aureus*. 182:664–671
- (2000) *Staphylococcus aureus*. 182:3955–3964
- (2012) *Staphylococcus aureus*. 7:29838
- (1992) *Staphylococcus aureus*. 36:1166–1169
- (1997) *Enterococcus faecalis*. 3:53–64
- (2013) *Staphylococcus aureus*. 23:142–143
- (1998) *Streptococcus pneumoniae*. 279:365–370
- (2011) *Staphylococcus aureus*. 7:1–9
- (2017) *Staphylococcus aureus*. 25:893–905
- (1990) *Enterococcus faecium*. 58:167–170
- (2011) *Staphylococcus aureus*. 35:247–274
- (2001) *Staphylococcus aureus*. 1:147–155
- (1997) *Staphylococcus aureus*. 40:135–136
- (2014) *Staphylococcus aureus*. 2:213–224
- (2015) *Staphylococcus aureus*. 49:161–169
- (1994) *Enterococcus faecium*. 33:4625–4631
- (2008) *Staphylococcus aureus*. 14:1–15
- (1999) *Staphylococcus aureus*. 58:2:6–10
- (2001) *Staphylococcus aureus*. 32:1–15
- (1991) *Staphylococcus aureus*. 10:223–231
- (2010) *Staphylococcus aureus*. 47:3222–3232
- (2010) *Staphylococcus aureus*. 57:4848–4855
- (2011) *Staphylococcus aureus*. 120:1484–1491
- (2003) *Escherichia coli*. 47:3222–3232
- (2010) *Staphylococcus aureus*. 57:4848–4855
- (2016) *Staphylococcus aureus*. 7:1601–1618
- (2004) *Staphylococcus aureus*. 48:909–917
- (2017) *Staphylococcus aureus*. 1861:1951–1959
- (2003) *Staphylococcus aureus*. 1451–1466
- (2002) *Staphylococcus aureus*. 68:2838–2842
- (2005) *Staphylococcus aureus*. 41:120–126
- (2013) *Staphylococcus aureus*. 280:1294–1307
- (2006) *Staphylococcus aureus*. 42:13–24
- (2014) *Staphylococcus aureus*. 58:333–341
- (2006) *Staphylococcus aureus*. 50:1276–1281
- (2005) *Staphylococcus aureus*. 49:1857–1864
- (1991) *Staphylococcus aureus*. 163:1080–1086
- (1993) *Staphylococcus aureus*. 37:1086–1094
- (2005) *Staphylococcus aureus*. 49:161–169
- (2005) *Staphylococcus aureus*. 105:425–448
- (2013) *Staphylococcus aureus*. 23:142–143
- (2011) *Staphylococcus aureus*. 57:4848–4855
- (2003) *Escherichia coli*. 47:3222–3232
- (2010) *Staphylococcus aureus*. 57:4848–4855

- 327–329
- (2014)
- 123–184
- 190424/ / 190424.
- 2017
- (2013)
- 57:4470–4480
- (1996)
- vanA*
- Enterococcus faecium*.
- 40:1645–1648
- (2010)
- 5:11338
- (2009)
- 16:667–669
- (1988)
- Enterococcus faecium*.
- 319:157–161
- (2003)
- Enterococcus faecalis*.
- 47:3733–3738
- (2006)
- 42:5–12
- (2009)
- 385:200–211
- (1998)
- 5:293–298
- (2001)
- Enterococcus faecium*
- 39:2140–2145
- (2006)
- Staphylococcus aureus*.
- 188:1899–1910
- (2003)
- Staphylococcus aureus*.
- 185:3703–3710
- (2016)
- 32:29–33
- (1994)
- 116:4581–4590
- (1998)
- Enterococcus*.
- 51:471–479
- (2017)
- 2008–2014.
- 45:459–467
- (2010)
- Staphylococcus aureus*.
- 300:118–129
- (2015)
- 1004949
- (2016)
- 41:532–537
- (2006)
- 50
- (1994)
- Streptococcus pneumoniae*
- 38:122–125
- (1971)
- 124:845–852
- (2009)
- Enterococcus faecium*.
- 32:483–488
- (2009)
- 385:1422–1432
- (2004)
- norA*
- Staphylococcus aureus*.
- 10:197–203
- (2003)
- 328:289–301
- (2003)
- Streptococcus pneumoniae*.
- 47:518–523
- (2015)
- (2010)
- 13:632–639
- (2016)
- 6:37853
- (2014)
- 20131935
- (2007)
- Staphylococcus aureus*.
- 51:3627–3633
- (2009)
- Staphylococcus aureus*.
- 53:4580–4587
- (2017)
- 7:12697
- (2017)
- 7:46180
- (2017)
- 34:854–865
- (2015)
- 2015160

- [illegible]

