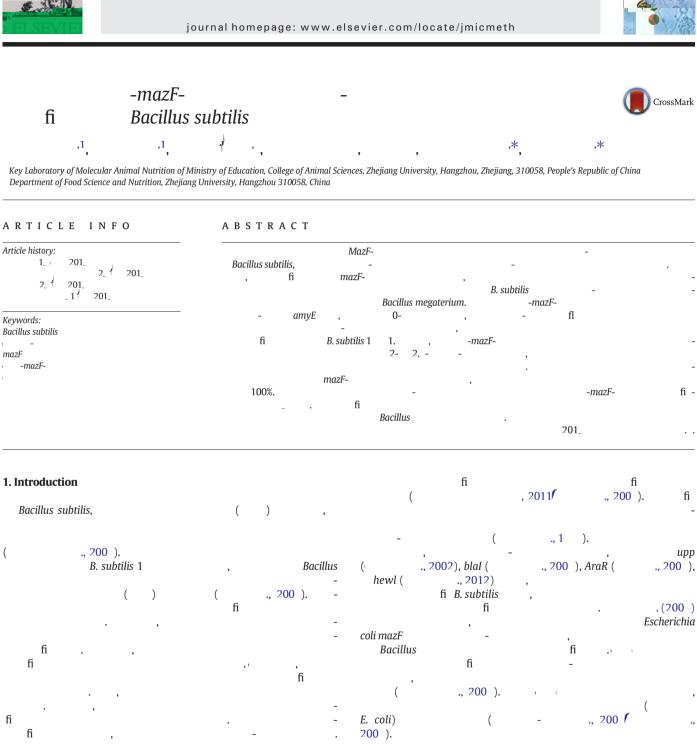


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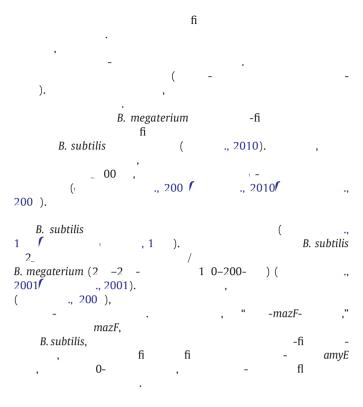
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### 2. Materials and methods

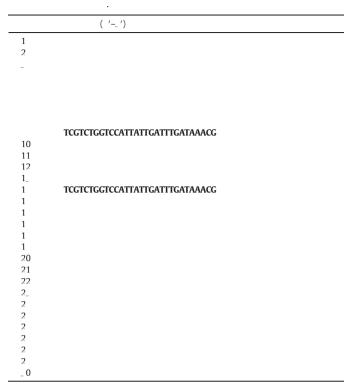
2.1. Bacterial strains, plasmids, and oligonucleotides

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Table 1

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Table 2



2.2. Culture and growth conditions

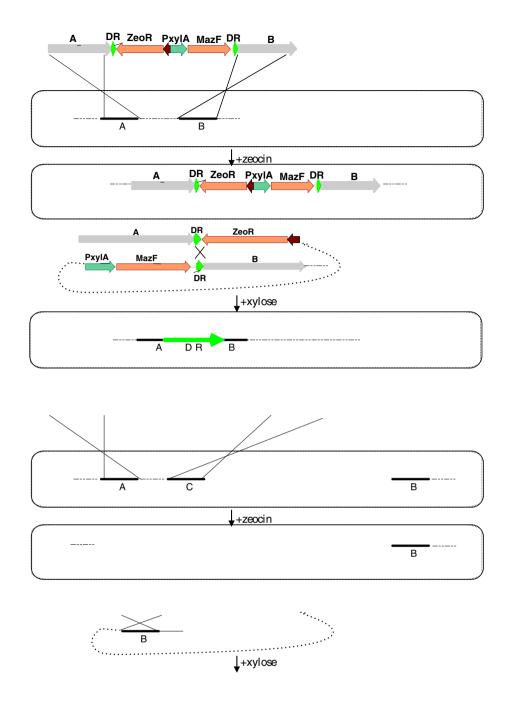
2.3. DNA manipulation techniques

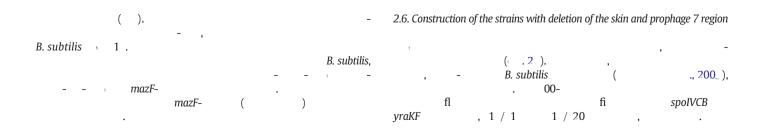
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2.4. Construction of recombinant B. subtilis containing the mini-mazF-cassette

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           B. subtilis 1
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                                                                            3.3. Strict regulation of xyl promoter from B. subtilis W23 among mini-
                fi
                                                    B. subtilis
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    -mazF-
                                                                            mazF-cassette
B. subtilis
           . 2.
                                                                                                                           -mazF-
2.7. Construction of the strains with unmarked knock-in of green fluorescent
protein (GFP) expression cassettes
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                                                  B. subtilis 1
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                     B. subtilis
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                     B. subtilis 1
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                                       B. subtilis
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                                                                                                             -mazF-
2.8. Nucleotide sequence accession number
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                          -mazF-
                                                                                                                                   B. subtilis
        _ ). B. subtilis
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3. Results
                                                                            B. megaterium.
3.1. Construction of recombinant B. subtilis containing the mini-mazF-
                                                                            3.4. Construction of the strain with deletion of the skin and prophage 7
cassette
                                                                            region
                                   -mazF-
Sal
        Xba
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          B. subtilis
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                      B. subtilis.
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3.2. Construction of the amyE deletion strains
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B. subtilis
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amyE
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mazF-
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B. subtilis
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mazF-
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B. subtilis 2001
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B. subtilis
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B. subtilis
                                                        ., 2001).
. (2010)
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                                        -mazF-
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#### **Conflict of interest**

.

## Acknowledgements

( \_ ,200 11 0 ) , ( .200 120 ).

# References

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Bacillus subtilis

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Bacillus subtilis

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Bacillus spp.

1 1 - 2.

( ) Bacillus subtilis

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200 .Bacillus subtilis

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Bacillus subtilis

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2002.

Bacillus subtilis

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2001.
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Escherichia coli.
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                  Bacillus subtilis.
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Bacillus subtilis
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Lactobacillus
pentosus
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                                      Bacillus subtilis
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Bacillus subtilis
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                                    , . ., 2001.
                             Bacillus/Clostridium
   .20 ,_0 -_1 .
                                                                    Bacillus megaterium
                                                                     - 2.
                          , , , , 200 .
                                                                      Bacillus
                                        . 0, 1-1 .
                  , , , 2011.
                                                    , Tetragenococcus halophila.
                                                        ., 2012. Bacillus subtilis
      , ..., , .., 200 .
Bacillus subtilis.
                    , ,, 200 .
                        Pichia pastoris. . , 00- 0 . , , , , , , , , , , 2010. fi
                                      Bacillus subtilis
20,
                              , ", , .., 200 .
                                                          Bacillus subtilis.
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