CLAIMS

1. A microbial cell expressing a mutant AlkB enzyme, the mutant AlkB enzyme comprising at least one point mutation in the wild type sequence of AlkB, wherein the point mutation is at amino acid position V129 and/or T136 of the wild type AlkB enzyme,
wherein the point mutation at amino acid V129 is selected from the group consisting of V129T and V129A,
wherein the point mutation at amino acid position T136 is T136A, and
wherein the wild type AlkB comprises a polypeptide with sequence identity of at least 80% to a polypeptide SEQ ID NO: 1.

2. The cell according to claim 1, wherein the point mutation is at amino acid position T136.

3. The cell according to either claim 1, wherein the wild type AlkB comprises a polypeptide with sequence identity of at least 90% to a polypeptide SEQ ID NO: 1.

4. The cell according to claim 1, wherein the wild type AlkB comprises a polypeptide with sequence identity of at least 95% to a polypeptide SEQ ID NO: 1.

5. The cell according to claim 1, wherein the point mutation is at amino acid position V129.

6. The cell according to claim 1, wherein the point mutation is at amino acid positions V129 and T136.

7. The cell according to claim 1, wherein the wild type AlkB comprises a polypeptide with sequence identity of at least 98% to a polypeptide SEQ ID NO: 1.

8. The cell according to any one of the preceding claims, wherein the wild type sequence of AlkB is SEQ ID NO:1.

9. The cell according to any one of the preceding claims, wherein the cell is further genetically modified to comprise increased expression relative to a wild type cell of
   - an enzyme E_1, an ω-transaminase capable of catalysing the conversion of the omega-oxocarboxylic acids and/or esters thereof to the corresponding omega-aminocarboxylic acids and/or esters thereof.

10. A method of producing at least one omega-hydroxy carboxylic acid and/or ester thereof from at least one carboxylic acid and/or ester thereof as substrate, the method comprising
   - contacting at least one genetically modified cell expressing a mutant AlkB enzyme with the substrate carboxylic acid and/or ester thereof,

wherein the substrate carboxylic acid and/or ester thereof is a C_6-C_{14} carboxylic acid and/or ester thereof; and

the mutant AlkB enzyme comprises at least one point mutation in the wild type sequence of AlkB,

wherein the point mutation is selected from the group consisting of V129T, T136A, V129A and L132V.

wherein the wild type AlkB comprises a polypeptide with sequence identity of at least 80% to a polypeptide SEQ ID NO: 1.

11. The method according to claim 10, wherein the wild type AlkB comprises a polypeptide with sequence identity of at least 90% to a polypeptide SEQ ID NO: 1.

12. The method according to claim 10, wherein the wild type AlkB comprises a polypeptide with sequence identity of at least 95% to a polypeptide SEQ ID NO: 1.

13. The method according to claim 10, wherein the wild type AlkB comprises a polypeptide with sequence identity of at least 98% to a polypeptide SEQ ID NO: 1

14. The method according to any one of claims 10 to 13, wherein the wild type sequence of AlkB is SEQ ID NO:1.

15. The method according to any one of claims 10 to 14, wherein the substrate carboxylic acid and/or ester thereof is lauric acid and/or lauric acid methyl ester (LAME) and the corresponding omega-hydroxy carboxylic acid and/or ester thereof is omega-hydroxylauric acid and/or omega-hydroxylauric acid methyl ester (HLAME).

16. A method of producing at least one omega-hydroxy carboxylic acid and/or ester thereof from at least one carboxylic acid and/or ester thereof as substrate, the method comprising

- contacting at least one genetically modified cell according to any of the claims 1 to 7 with the substrate carboxylic acid and/or ester thereof.

17. A method of producing at least one omega-aminocarboxylic acid and/or ester thereof from at least one carboxylic acid and/or ester thereof as substrate, the method comprising

- contacting the cell according to claim 9 with the substrate carboxylic acid and/or ester thereof.

18. Use of the cell according to any one of claims 1 to 8, for catalysing the conversion of a carboxylic acid and/or ester thereof to a corresponding omega-hydroxy carboxylic acid.

19. Use of the cell according to claim 9, for catalysing the conversion of a carboxylic acid and/or ester thereof to a corresponding omega-amino carboxylic acid and/or ester thereof.