CLAIMS

1. A composition comprising a first and second sialidase,

wherein the first sialidase is a polypeptide comprising or consisting of an amino acid sequence of SEQ ID NO: 2; and

wherein the second sialidase is a polypeptide comprising or consisting of an amino acid sequence of SEQ ID NO: 5; and

wherein the composition additionally comprises an O-glycosidase comprising or consisting of an amino acid sequence of SEQ ID NO: 9.

2. The composition according to claim 1, wherein said first and/or second sialidase includes an additional methionine at the N terminus and/or a histidine tag at the C terminus, which tag may be joined to the C terminus by a linker.

3. The composition according to claim 1 or claim 2, which is capable of hydrolysing >90% of sialic bonds in a glycoprotein.

4. The composition according to claim 3, wherein the glycoprotein is a glycoprotein in its native, non-denatured state.

5. The composition according to any one of claims 1 to 4, which comprises the sialidase consisting of the amino acid sequence of SEQ ID NO: 3 and the sialidase consisting of the amino acid sequence of SEQ ID NO: 6.

6. The composition according to claim 5, wherein the sialidase consisting of the amino acid sequence of SEQ ID NO: 3 and the sialidase consisting of the amino acid sequence of SEQ ID NO: 6 are in a 1:1 ratio.

7. The composition according to any one of the preceding claims, wherein the first sialidase and/or the second sialidase are present in highly purified or isolated form.

8. The composition according to any one of the preceding claims, wherein no more than two polypeptides in the composition are sialidases obtained from *Akkermansia muciniphila*.

9. The composition according to any one of the preceding claims, which additionally comprises an O-glycoprotein-specific endoprotease.

10. The composition according to claim 9, wherein the O-glycosidase and/or the O-glycoprotein-specific endoprotease is present in highly purified or isolated form.

11. The composition according to any one of the preceding claims, wherein said O-glycosidase consists of the amino acid sequence of SEQ ID NO: 10.

12. The composition according to any one of claims 9 to 11, wherein said O-glycoprotein-specific endoprotease is an O-glycoprotein-specific endoprotease selected from:

a. a polypeptide comprising or consisting of an amino acid sequence of SEQ ID NO: 11;
b. a polypeptide comprising or consisting of an amino acid sequence which is at least 85% identical to the amino acid sequence of SEQ ID NO: 11 or
c. a polypeptide comprising or consisting of an amino acid sequence which is a fragment of the sequence of SEQ ID NO: 11 or a fragment of a sequence which is 85% identical to the amino acid sequence of SEQ ID NO: 11.

13. The composition according to claim 12, wherein said O-glycoprotein-specific endoprotease consists of the amino acid sequence of SEQ ID NO: 12.

14. A method for modifying a glycoprotein comprising contacting a sample containing the glycoprotein with a composition according to any one of the preceding claims.

15. The method according to claim 14, wherein the resulting products are analysed.

16. The method according to claim 14 or claim 15, wherein the resulting products are analysed, and wherein said analysis includes the separation and/or detection and/or isolation of the products by any suitable means, including SDS-PAGE, HPLC, lectin blotting, ELISA or mass spectrometry.

17. A method according to any one of claims 14 to 16, wherein the composition is as defined in any one of claims 1 to 7, and wherein the method comprises contacting said sample with an O-glycoprotein-specific endoprotease simultaneously, before or after the glycoprotein is contacted with said composition.

18. A method according to claim 14 or claim 15, wherein the composition additionally comprises an O-glycoprotein-specific endoprotease.

19. The method according to claim 18, wherein said O-glycoprotein-specific endoprotease is as defined in claim 12 or claim 13.