



We claim

1. Beta-3 subunit of a human G protein which consists of not
5 more than six WD repeat motifs.
2. A protein as claimed in claim 1, having the amino-acid
sequence depicted in SEQ ID NO: 2.
- 10 3. A nucleic acid sequence coding for a protein as claimed in
claim 1 or 2.
4. A nucleic acid sequence as claimed in claim 3 having the
sequence depicted in SEQ ID NO:1.
- 15 5. A process for preparing a protein as set forth in any of the
preceding claims, which comprises a nucleic acid sequence as
set forth in any of the preceding claims being provided where
appropriate with suitable regulatory signals and expression
20 being brought about in a host organism.
6. A process as claimed in claim 5, wherein the expression takes
place in immune cells from immunodeficient persons.
- 25 7. A process as claimed in claim 6, wherein the persons are
HIV-positive.
8. A process as claimed in claim 5, wherein the expression takes
place in human body cells.
- 30 9. The use of a nucleic acid sequence as set forth in any of the
preceding claims for preparing a drug for the treatment of
diseases associated with G protein dysregulation.
- 35 10. The use of a genetic modification in the gene for human G
protein β 3 subunit for the diagnosis of disorders.
11. The use of a genetic modification in the gene for human G
protein β 3 subunit for determining the risk of suffering from
40 a disease associated with G protein dysregulation.
12. The use as claimed in claim 10 or 11, wherein the genetic
modification embraces the nucleic acid sequence depicted in
SEQ ID NO: 1.



13. The use as claimed in claim 10-12, wherein the disease is a cardiovascular disorder, a metabolic disturbance or an immunological disorder.
- 5 14. The use as claimed in claim 10-12, wherein the disease is hypertension.
15. The use of a nucleic acid sequence as set forth in any of the preceding claims for producing transgenic animals.
- 10 16. The use of a nucleic acid sequence which is complementary to the nucleic acid sequence as claimed in claim 3 or 4 for producing an antisense drug for the therapy or prevention of diseases.
- 15 17. The use as claimed in claim 16, wherein the diseases are hypertension, pregnancy hypertension, coronary heart disease, restenosis after angioplastic procedures or stroke.
- 20 18. The use as claimed in claim 16, wherein the diseases [sic] is a diabetic sequela such as nepropathy [sic], polyneuropathy or retionopathy [sic].
- 25 19. The use as claimed in claim 16, wherein the disease is a metastatic tumor.
- 30 20. A method for determining a relative risk of suffering from diseases associated with G protein dysregulation for a subject by comparing the gene sequence for human G protein $\beta 3$ subunit of the subject with the gene sequence SEQ ID NO: 1 and, in the event that it coincides with SEQ ID NO: 1, assigning an increased risk to the subject.
- 35 21. A method as claimed in claim 20, wherein the gene comparison is carried out by sequencing, restriction analysis or selective hybridization.
- 40 22. The use of a protein as claimed in claim 1 or 2 for preparing antibodies directed specifically against this protein.