CLAIMS

1. A cell culture medium for the expression of a protein, which medium comprises a PAM inhibitor, or a salt or an ester thereof, wherein said expression is a heterologous protein expression, and wherein the salt or ester dissolves, or is hydrolysed as applicable, to the PAM inhibitor in a physiological setting.

2. A cell culture process for the expression of a protein, in which process a PAM inhibitor, or a salt or an ester thereof, is used, wherein said expression is a heterologous protein expression, and wherein the salt or ester dissolves, or is hydrolysed as applicable, to the PAM inhibitor in a physiological setting.

3. The process or the cell culture medium according to claims 1 or 2, wherein the heterologous expression takes place in a mammalian cell based expression system

4. The process or the cell culture medium according to any of claims 1 - 3, wherein said protein is at least one protein selected from the group consisting of:

- an antibody, or a immunologically active fragment or derivative thereof, wherein the derivative retains functional property of the antibody,
- a fusion protein, and/or
- non-antibody proteins.

5. The process or the cell culture medium according to claims– 3 or 4, wherein said mammalian cell-based expression system is at least one selected from the group consisting of:

- Baby hamster Kidney cell lines (e.g., BHK21)
- Chinese hamster ovary cell lines (e.g., CHO-K1, CHO-DG44, CHO-DXB, or CHO-dhfr$^-$)
- Murine myeloma cell lines (e.g., SP2/0)
- Mouse myeloma cell lines (e.g., NS0)
- Human embryonic kidney cell lines (e.g., HEK-293)
- Human-retina-derived cell lines (e.g., PER-C6), and/or
- Amniocyte cell lines (e.g., CAP).

6. The process according to any of claims 2 - 5, wherein said process takes place in at least one bioreactor or culture vessel selected from the group consisting of:

- shake flasks
- T-flasks
- roller bottles
- bags
- bioreactors, and/or
- spinner flasks.

7. The process or the cell culture medium according to any of claims 1 - 6, wherein the PAM inhibitor is 4-phenyl-3-butenoic acid (PBA).

8. The process or the cell culture medium according to claim 7, wherein 4-phenyl-3-butenoic acid (PBA), or a salt or an ester thereof, is used in a concentration of $\geq$ 0,01 µM and $\leq$ 3M.

What is claimed is:

1. A cell culture medium for the expression of a protein, which medium comprises a PAM inhibitor, or a salt or an ester thereof, wherein said expression is a heterologous protein expression, and wherein the salt or ester dissolves, or is hydrolysed as applicable, to the PAM inhibitor in a physiological setting.

2. A cell culture process for the expression of a protein, in which process a PAM inhibitor, or a salt or an ester thereof, is used, wherein said expression is a heterologous protein expression, and wherein the salt or ester dissolves, or is hydrolysed as applicable, to the PAM inhibitor in a physiological setting.

3. The process or the cell culture medium according to claims 1 or 2, wherein the heterologous expression takes place in a mammalian cell based expression system

4. The process or the cell culture medium according to any of claims 1 - 3, wherein said protein is at least one protein selected from the group consisting of:

- an antibody, or a fragment or derivative thereof
- a fusion protein, and/or
- non-antibody proteins.

5. The process or the cell culture medium according to claims– 3 or 4, wherein said mammalian cell-based expression system is at least one selected from the group consisting of:

- Baby hamster Kidney cell lines (e.g., BHK21)
- Chinese hamster ovary cell lines (e.g., CHO-K1, CHO-DG44, CHO-DXB, or CHO-dhfr$^-$)
- Murine myeloma cell lines (e.g., SP2/0)
- Mouse myeloma cell lines (e.g., NS0)
- Human embryonic kidney cell lines (e.g., HEK-293)
- Human-retina-derived cell lines (e.g., PER-C6), and/or
- Amniocyte cell lines (e.g., CAP).

6. The process according to any of claims 2 - 5, wherein said process takes place in at least one bioreactor or culture vessel selected from the group consisting of:

- shake flasks
- T-flasks
- roller bottles
- bags
- bioreactors, and/or
- spinner flasks.

7. The process or the cell culture medium according to any of claims 1 - 6, wherein the PAM inhibitor, or the salt or ester thereof, serves to inhibit the formation of amidated amino acid residues, particularly C-terminal proline amide residues.

8. The process or the cell culture medium according to any of claims 1 - 7, wherein the PAM inhibitor is 4-phenyl-3-butenoic acid (PBA).

9. The process or the cell culture medium according to claim 8, wherein 4-phenyl-3-butenoic acid (PBA), or a salt or an ester thereof, is used in a concentration of $\geq$ 0,01 µM and $\leq$ 3M.