Claims

1. A process for the production of a recombinant polypeptide comprising a production phase wherein recombinant CHO cells are cultured in a cell culture medium and the recombinant polypeptide is expressed, wherein the cell culture medium is serum-free and protein-free comprising 60 to 2500 mg/L of choline chloride or an equivalent amount of another choline salt and having a total concentration of amino acids of 20 to 57 mmol/L.

2. The process according to claim 1 wherein the recombinant polypeptide is a recombinant antibody.

3. The process according to claim 1 or 2 wherein the cells are cultured in a fed-batch process.

4. The process according to any of claims 1 to 3, wherein the cell culture medium comprises 80 to 1000 mg/L of choline chloride or an equivalent amount of another choline salt.

5. The process according to any of claims 1 to 4, wherein the cell culture medium has a total concentration of amino acids of 35 to 54 mmol/L.

6. The process according to any of claims 1 to 5 wherein the cell culture medium contains glutamine in a concentration of 500 to 1400 mg/L.

7. The process according to any of claims 1 to 6, wherein the content of glutamine in the cell culture medium is in an amount of 900 to 1200 mg/L.

8. The process according to any of claims 1 to 7, wherein the cell culture medium according to any of claims 6 or 7 comprises the following amino acids in the following concentrations, expressed in mmol/L:

Arginine	4.0 – 6.0
Asparagine	3.0 – 6.0
Aspartic acid	2.5 – 4.0
Glycine	0.3 – 0.8
Histidine	0.6 – 1.0
Isoleucine	2.0 – 5.0
Leucine	3.0 – 7.0
Lysine	2.0 – 4.0
Methionine	1.0 – 1.5
Phenylalanine	1.0 – 2.0
Proline	2.5 – 6.0
Serine	3.0 – 8.0
Threonine	2.0 – 3.5
Tryptophane	0.4 – 1.0
Valine	2.5 – 5.0
Tyrosine	1.0 – 2.0
Cystine	0.5 – 1.0

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. A process for the production of a recombinant polypeptide comprising a production phase wherein recombinant CHO cells are cultured in a cell culture medium and the recombinant polypeptide is expressed, wherein the cell culture medium is serum-free and protein-free comprising 60 to 2500 mg/L of choline chloride or an equivalent amount of another choline salt and having a total concentration of amino acids of 20 to 57 mmol/L.

2. The process according to claim 1 wherein the recombinant polypeptide is a recombinant antibody.

3. The process according to claim 1 or 2 wherein the cells are cultured in a fed-batch process.

4. The process according to any one of claims 1 to 3, wherein the cell culture medium comprises 80 to 1000 mg/L of choline chloride or an equivalent amount of another choline salt.

5. The process according to any one of claims 1 to 4, wherein the cell culture medium has a total concentration of amino acids of 35 to 54 mmol/L.

6. The process according to any one of claims 1 to 5, wherein the cell culture medium contains glutamine in a concentration of 500 to 1400 mg/L.

7. The process according to any one of claims 1 to 6, wherein the content of glutamine in the cell culture medium is in an amount of 900 to 1200 mg/L.

8. The process according to any one of claims 1 to 7, wherein the cell culture medium of claim 6 or 7 comprises the following amino acids in the following concentrations, expressed in mmol/L:

Arginine	4.0 - 6.0
Asparagine	3.0 - 6.0
Aspartic acid	2.5 - 4.0
Glycine	0.3 - 0.8
Histidine	0.6 - 1.0
Isoleucine	2.0 - 5.0
Leucine	3.0 - 7.0
Lysine	2.0 - 4.0
Methionine	1.0 - 1.5
Phenylalanine	1.0 - 2.0
Proline	2.5 - 6.0
Serine	3.0 - 8.0
Threonine	2.0 - 3.5
Tryptophane	0.4 - 1.0
Valine	2.5 - 5.0
Tyrosine	1.0 - 2.0
Cystine	0.5 - 1.0