culture medium for eukaryotic cells (Non Patent Literature 1) and VB12 is a component essential for culturing mammal cells (Patent Document 1).

CITATION LIST

PATENT LITERATURE

[0007] Patent Literature 1: WO 2018/208743

Patent Literature 2: Japanese Translation of PCT International Application Publication No. 2015-515281

NON PATENT LITERATURE

[0008] Non Patent Literature 1: MAbs. 2013 Nov 1; 5(6): 974-981

Non Patent Literature 2: MAbs. 2014 May 1; 6(3): 679-688

Non Patent Literature 3: Biotechnology and Bioengineering. 2018;115: 900-909

SUMMARY

[0008a] In one aspect, the present disclosure provides a method for producing a composition containing an antibody with suppressed coloring, wherein the antibody comprises a heavy chain constant region containing an amino acid sequence of SEQ ID NO: 1 and a light chain constant region containing an amino acid sequence of SEQ ID NO: 2, the method comprising the steps of: a) culturing CHO cells containing a nucleic acid encoding the antibody by fed-batch culture that is performed with an initial culture medium free of vitamin B12, and a feed culture medium free of vitamin B12; and b) collecting a composition containing the antibody from the culture.

[0008b] In another aspect, the present disclosure provides a method for producing an antibody-containing pharmaceutical preparation, which comprises producing a composition containing the antibody by the method as disclosed herein, and formulating the resulting composition into a pharmaceutical preparation.

CLAIMS

1. A method for producing a composition containing an antibody with suppressed coloring, wherein the antibody comprises a heavy chain constant region containing an amino acid sequence of SEQ ID NO: 1 and a light chain constant region containing an amino acid sequence of SEQ ID NO: 2, the method comprising the steps of:

a) culturing CHO cells containing a nucleic acid encoding the antibody by fed-batch culture that is performed with an initial culture medium free of vitamin B12 and a feed culture medium free of vitamin B12; and

b) collecting a composition containing the antibody from the culture.

2. The method for producing a composition according to claim 1, wherein the molar concentration ratio of vitamin B12 to the antibody in the composition is less than 0.26%.

3. The method for producing a composition according to claim 1, wherein the VCD (viable cell density) in the cell culture medium on the seventh day after the start of the fed-batch culture is 80×10^5 cells/mL or more.

4. The method for producing a composition according to claim 1, wherein the antibody is a humanized IgG1 antibody which binds to latent myostatin.

5. A method for producing an antibody-containing pharmaceutical preparation, which comprises producing a composition containing the antibody by the method according to any one of claims 1 to 4, and formulating the resulting composition into a pharmaceutical preparation.