

CHO Serum-Free Basal Medium

Cat. No. : SF2001

Size : 500mL

Applicable cell lines

CHO serum-free basal medium is a fully chemically defined (CD) basal medium that does not contain hydrolysates, proteins, growth factors, or any animal-derived components. It is suitable for high-density suspension culture of different subtypes of Chinese hamster ovary cells (CHO-K1, CHODG44, CHOZN, etc.). With high-performance feed (CHO serum-free feed A, CHO serum-free feed B) medium, it can support high-density cell growth and viability maintenance, and achieve higher levels of protein/antibody expression and quality.

Medium characteristics

1. Chemically-Defined, CD.
2. Free of hydrolysates, proteins, growth factors or ingredients of any animal origin.
3. Free of HT and L-glutamine.

Culture conditions

1. The culture temperature is 37°C, and the recommended initial cell seeding density is $0.8-1.2 \times 10^6$ cells/mL in batch and fed-batch culture process.
2. Under the condition of non-automatic pH control, it is recommended to control the CO₂ concentration at 5%.
3. Process conditions such as pH, DO and temperature can be set according to process development results or platform process parameters.

Cells medium adaptation

1. Direct adaptation: In the initial culture stage, the cells are recommended to be inoculated at the density of $0.5-1 \times 10^6$ cells/mL, and the original medium is directly replaced with CHO serum-free basal medium for cell culture. After the cells have been cultured for 2-3 generations and the cell growth is stable, subsequent experiments could be carried out.
2. Indirect adaptation: CHO serum-free basal medium and cell original medium are mixed in a ratio of (75:25, 50:50, 25:75, 0:100) for gradual passage. It is recommended that each mixed ratio could passage for 2-3 generations, which can be adjusted according to cell growth status; When the medium was completely replaced with CHO serum-free basal medium, passages are continued for 3 to 5 times until the cell growth is stable for subsequent experiments.

Cryopreserve cells

Use the freezing medium made from this product for cell freezing, it is recommended to add 10% DMSO, and the cell freezing density is $1.0-2.0 \times 10^7$ cells/mL.

Storage

Store in 2-8°C; protect from light.

Shelf life: 12 months