

BalanCD® CHO Feeds

BalanCD CHO Feed 1	Liquid Catalog #91127 Powder Catalog #94119
BalanCD CHO Feed 2	Liquid Catalog #91129 Powder Catalog #94121
BalanCD CHO Feed 3	Liquid Catalog #99471 Powder Catalog #94118

INTENDED USE

BalanCD®CHO Feeds are chemically-defined feed media designed to optimize cell growth and protein production in CHO cells when used in a fed batch process. These feeds have the capability to more than double the growth and protein production when compared to a batch culture. BalanCD CHO Feed 1 was designed to be used in conjunction with BalanCD CHO Growth A.

QUALITY ASSURANCE

All Quality Control test results are reported on a lot specific Certificate of Analysis which is available upon request.

FORMULA

BalanCD CHO Feeds are formulated using chemically-defined components in high concentrations based on typical CHO cell requirements. These feeds contains no protein hydrolysates or any other undefined components. These media contains no antibiotics or antimycotics.

STORAGE INSTRUCTIONS AND PRECAUTIONS

Handle using aseptic techniques to avoid contamination. Store liquids at 2-8°C, away from light. Store powders dry at 2-8°C. Do not use after the assigned expiration date. Do not use any bottle of medium which shows evidence of particulate matter or cloudiness.

DIRECTIONS FOR USE

When evaluating a new fed-batch process it is recommended to try several volumes of feed and feeding strategies. We recommend starting with a feed volume of 10-50% of the initial culture volume.

Process development can be conducted to determine a more optimal concentration and feeding schedule for a specific cell line and process.

PREPARATION FROM POWDER

1. Add appropriate amount of powder medium (refer to table below) to WFI or deionized/distilled water in an appropriately sized container.
2. Mix the solution for until the powder is well dissolved, the solution may still appear cloudy at this point
3. Add 2.2g/L sodium bicarbonate to the solution. Mix until sodium bicarbonate is completely dissolved.
4. For BalanCD CHO Feed 1 stir solution until pH reaches a minimum of 6.8-7.2. Alternatively, sodium hydroxide (5N) can be added to raise pH if desired. For BalanCD CHO Feeds 2 and 3, add appropriate amount of sodium hydroxide (5N) to media (refer to table below)
5. Measure osmolality of the solution. For expected value refer to table below
6. Sterile filter through a 0.2 µm filter membrane into a sterile vessel
7. Store at 2-8°C, in the dark for up to 6 months

Media	BalanCD CHO Feed 1	BalanCD CHO Feed 2	BalanCD CHO Feed 3
Powder P/N	94119	94121	94118
Amount of Powder (g/L)	55.78	52.10	65.96
Amount of Water (mL/L)	980	970	960
Amount of NaOH (mL/L)	0	4.5	4.5
Expected pH	6.8-7.2	7.0-7.6	7.0-7.6
Expected Osmolality (mOsm/kg)	425-445	415-445	540-580

FEED EVALUATION

Below is an example of feed evaluation

1. Determine working volume of culture (w.v.), i.e. 30 mL in 125 mL shake flask.
2. Inoculate cells in basal medium in 30 mL w.v.
3. On culture days 1, 3, and 5 feed 5% of the initial w.v. with a BalanCD CHO Feed, for a total 15% of initial w.v. over 3 events. Feed can also be added as a single bolus feeding in one feed event (e.g., on day 3)

Also Available from Irvine Scientific:

BalanCD CHO Growth A Liquid Catalog No. 91128
Powder Catalog No. 94120

BalanCD CHO Growth A is an animal component-free, chemically-defined basal medium designed for the production of recombinant proteins in Chinese Hamster Ovary (CHO) cells. BalanCD CHO Growth A has been optimized for use in conjunction with BalanCD CHO Feed 1.

IS CHO-CD4 Liquid Catalog No. 91100
Powder Catalog No. 94104

IS CHO-CD Liquid Catalog No. 91119
Powder Catalog No. 94111

IS CHO-CD4 and IS CHO-CD are chemically-defined media optimized for the production of recombinant proteins in Chinese Hamster Ovary (CHO) cells. These media are free of any components derived from human, bovine, or other mammalian sources.

CHO Media Development Kit Liquid Kit No. 99548-4x1L
Powder Kit No. 98814-4x10L

The CHO Media Development Kit contains four diverse chemically-defined growth media designed for use in a general media screen study or as a basis for further development and optimization based on specific production systems and cell lines. These media were designed independently of each other using high complexity Design of Experiments (DOE) to optimize the concentration of key nutrients. Each of the four media in the CHO Media Development Kit may be used either in batch or fed-batch culture systems.



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