Data Sheet

CellPrime® rTransferrin AF

An essential component for optimized cell culture performance

The primary function of transferrin in cell culture systems is to facilitate extracellular iron binding and transport. It allows for optimal iron metabolism and promotes viability and proliferation in cells grown in serum-free media. CellPrime® rTransferrin AF is specifically manufactured for industrial cell culture applications. It provides all the advantages of the natural plasma-derived transferrin, with the added benefits of non-animal origin compliance.

CellPrime® rTransferrin AF is a regulatory-friendly alternative to plasma-derived transferrin. As a recombinant protein expressed in *Saccharomyces cerevisiae*, CellPrime® rTransferrin AF is a non-animal origin alternative to animal-derived transferrin. Several studies demonstrate similar potency as serum transferrin in supporting cell growth and protein production, and superior performance compared to chemical supplements across multiple cell lines.

CellPrime® rTransferrin AF is manufactured under cGMP in FDA-inspected facilities, creating a pure material that consistently meets product specifications from batch to batch.

CellPrime® rTransferrin AF features

- Non-animal origin
- Superior alternative to current iron supplements
- Demonstrated improvement over human and bovine transferrin
- Allows for biological, not chemical, iron supplementation
- Used successfully with several industrial cell lines

Methods for use

CellPrime® rTransferrin AF is supplied as a 0.2 µm filtered liquid formulated in 145 mM NaCl, pH 6.8, at 20 g/L and can be directly added to the culture medium. A titration of CellPrime® rTransferrin AF should be performed for each application as the optimum concentration may vary according to cell type, culture conditions, and other components present in the medium. The recommended final concentration range is 1-10 mg/L.
If filtration is required, it should be performed using a low protein-binding membrane such as polyvinylidene difluoride (PVDF), polyethersulfone (PES) or cellulose acetate (CA) with a pore size of 0.22 µm.

CellPrime® rTransferrin AF can be directly substituted for bovine or human-derived transferrin. Cultures that have previously been cultured in a medium containing iron chelators may require adaptation and the benefits of CellPrime® rTransferrin AF may not be apparent until after sub-culturing (Keenan et al. 2006).

Specifications

Assay	Specification
Protein by Kjeldahl	18—22 g/L
Purity by RP-HPLC	≥95 %
pH (1 % solution) by standard method	6.0—8.0
Inspection	Clear, red/pink solution
Endotoxin by LAL	≤20 EU/mL
Iron content by atomic absorption	1.3—1.7 mg/g
Total iron capacity by atomic absorption	≥1.0 mg/g

Ordering information

Description	Qty/Pk	Catalog No.
CellPrime® rTransferrin AF 2 % solution	0.2 g/10 mL	9701-10
	1 g/50 mL	9701-50
	Bulk	

For more information and documentation please contact:

Phone: +49 6151-72 0
Email: pcs.salessupportEU@merckgroup.com

Merck Millipore
Merck KGaA
Frankfurter Str. 250
64293 Darmstadt, Germany

www.merckmillipore.com

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