

cellgro[®] rhTransferrin

Recombinant Human Transferrin, Animal-free

Introduction

cellgro[®] rhTransferrin is recombinant human serum transferrin that has been produced in an animal-free expression system. Human transferrin is responsible for iron transport in animals. In cells, intracellular iron is required to maintain cell growth. Transferrin is the preferred method for iron delivery into cells where it enters through the transferrin receptor. Each 80 kDa transferrin protein can transport two iron molecules. In cell culture applications, iron delivery by transferrin has advantages compared to free iron or iron-chelators. Free iron promotes free radical formation by Fenton chemistry, which can damage cells. Iron-chelators tend to disrupt downstream processes and can have lower iron bioavailability requiring excessive iron loading in cell culture media.

Applications

cellgro[®] rhTransferrin has been shown to enhance the growth of many cell types including CHO, HEK 293, hybridoma, primary cell lines. The optimum concentration of cellgro[®] rhTransferrin for cell culture varies with the cell line. The reported effective concentrations for hybridoma and Vero cell lines range from 5-20 mg/L. Effective concentrations for primary cells vary between 5-100 mg/L. Cell lines require little or no adaptation to cellgro[®] rhTransferrin.

Storage and Preparation

cellgro[®] rhTransferrin powder should be stored at -20° C. Stock solutions can be prepared by dissolving cellgro[®] rhTransferrin gently into PBS for several minutes. Avoid the formation of bubbles when dissolving. Typical stock concentrations are 5-20 mg/ml in PBS, although others can be used. Filter through 0.2µ filter to sterilize. rhTransferrin is stable in solution for several weeks at 4° C and can be stored frozen at -20° C for longer term storage. Avoid repeated freeze-thaw cycles of cellgro[®] rhTransferrin solution.

Product Name	Category No.	Size
cellgro [®] rhTransferrin	62-452-RA	0.1 g