Transferrin (Partially Iron Saturated) from Human Plasma

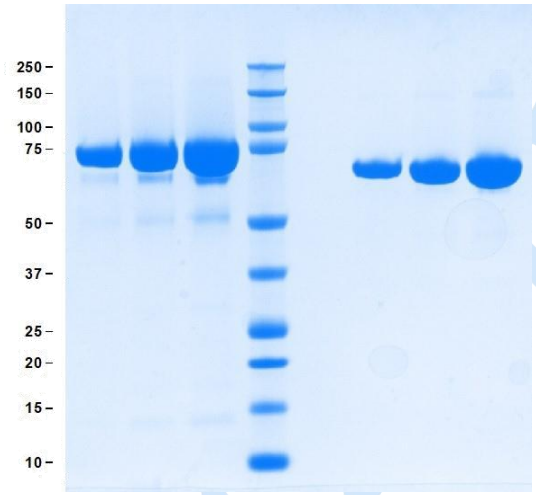
T754984

Storage

Store at -20℃ long term (>1 year). Upon reconstitution, it is recommended to aliquot. Avoid freeze/thaw cycle.

Introduction

Transferrin is a glycoprotein with a branched carbohydrate chain, having two sites for ferric ion binding in its polypeptide chain.



SDS-PAGE

4-12% Bis-Tris gel, 1x MES

1.Transferrin(SIDERO), Partially Iron Saturated, Tissue Culture Grade 5μg (Heated/Reduced).

2.Transferrin(SIDERO), Partially Iron Saturated, Tissue Culture Grade 10μg (Heated/Reduced).

3.Transferrin(SIDERO), Partially Iron Saturated, Tissue Culture Grade 20μg (Heated/Reduced).

4.Standard.

5.Blank.

6.Transferrin(SIDERO), Partially Iron Saturated, Tissue Culture Grade 5μg (Not Heated/Non-Reduced).

7.Transferrin(SIDERO), Partially Iron Saturated, Tissue Culture Grade 10μg (Not Heated/Non-Reduced).

8.Transferrin(SIDERO), Partially Iron Saturated, Tissue Culture Grade 20μg (Not Heated/Non-Reduced).

Protein Determination:

Biuret Method.

Considerations:

Storage Conditions:≤-20℃.

Stability:>1year.

Molecular Weight:

80,000 Da.

Buffer:

Lyophilized from sterile de-ionized water, pH 7.0-7.5.

Heat treated at 60℃ for 10 hours.

Physical Specifications:

Form: Lyophilized.

Purity:≥98% by SDS-PAGE.

Application

Transferrin human has been used:

1. to incubate human proximal tubule cells (HKC) - 8 cells along with IgG for the examination of albumin specificity;
2. as a supplement in serum-containing/devoid medium for human thyroid cell culture;
3. as a target glycoprotein to develop an in-gel hydrazinolysis method.

Biochem/physiol Actions

Transferrin mediates iron transportation from plasma to cells. The iron-bound transferrin are of three forms: monoferric A/B transferrin and diferric transferrin.The transferrin binds to specific cell surface receptors and are internalized by endocytosis. Once inside, the iron is released into the cells and the iron-free transferrin, also referred to as apotransferrin, is exocytosed outside the cell without being degraded. Transferrin is known to deliver iron to cells in a physiologically safe and effective form.

Product Datasheet

Form: Lyophilized.

Available Packaging: 100mg and 1g. Larger aliquots are available upon request.

Buffer: Lyophilized from sterile de-ionized water, pH 7.0-7.5. Heat treated at 60℃ for 10 hours.

Purity: ⩾98% by SDS-PAGE.

Molecular Weight: 80,000Da.

Protein Determination: Biuret Method.

Iron Content: ⩾300–600ppm.

Storage/Handling: ⩽-20℃.

Stability: >1year.

Source: Human Plasma.

Testing: Donor material is obtained from suppliers that perform a comprehensive infectious disease screening panel. Each unit of plasma is tested by the supplier and found non-reactive for HIV-1/2, Hepatitis B surface antigen (HBsAg), Hepatitis C (HCV), Hepatitis A (HAV), and syphilis (RPR). Documentation of testing is maintained and is available upon request.