Recombinant Human Serum Albumin, OsrHSA Lyophilized Powder

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Source: Rice Grain (*Oryza Sativa*)

Catalog No. : HY100M1

Introduction

Human serum albumin is the most abundant protein in human plasma. It can transport hormones, lipids, and other molecules, buffer pH, and maintain osmotic pressure, among other functions. OsrHSA is a recombinant human serum albumin derived from rice grains, which provides an excellent solution for xeno-free medium. Compared to FBS, pHSA and BSA, OsrHSA has a higher purity and better batch consistency in most cases. In the meanwhile, OsrHSA is also widely used as excipient, stabilizer and embedding agent in bio-pharmaceutical applications.

Specification

Molecular Weight: 66.5kD

Physical Appearance: Off-white to light beige lyophilized powder.

Formulation: OsrHSA is purified by chromatography from gene-modified rice endosperm, then lyophilized with saline.

Purity: Greater than 99% as determined by SDS-PAGE and HPLC analysis.

Endotoxin: Less than 0.125EU/mg

Preparation and Storage

Reconstitution: It is recommended to reconstitute OsrHSA at 200mg/ml in sterile PBS. Further dilutions can be made in other aqueous buffer.

Stability and Storage: Lyophilized OsrHSA can remain stable at 2~8°C for at least 24 months. Upon reconstitution OsrHSA should be stored at 4°C for 6 month and for future use at -20°C.

Please avoid repeated freeze-thaw cycles.

Features and Benefits

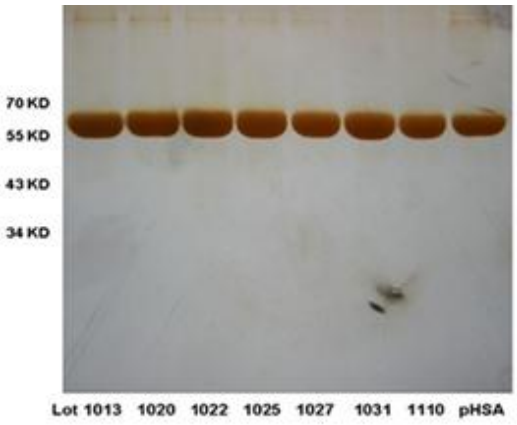
Scalable: Rice endosperm platform makes the manufacture capability at kilograms scales to meet your bulk needs.

Stability and Activity in Culture: Providing consistent performance in cell culture media with lower cost and time consuming, especially in bioprocessing.

FOR RESEARCH, LABORATORY AND MANUFACTURE USE ONLY. NOT INTENDED FOR DIRECT USE ON HUMANS.

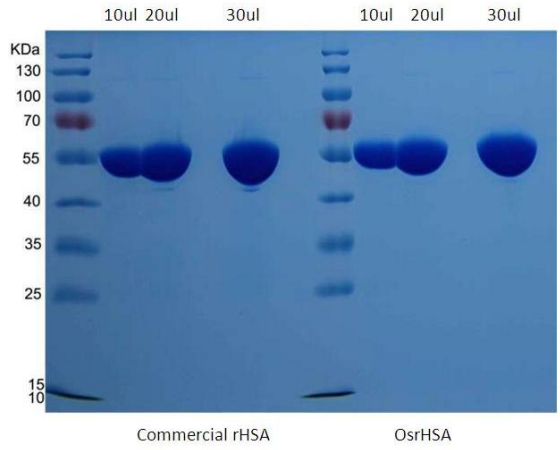
Data

1.SDS-PAGE



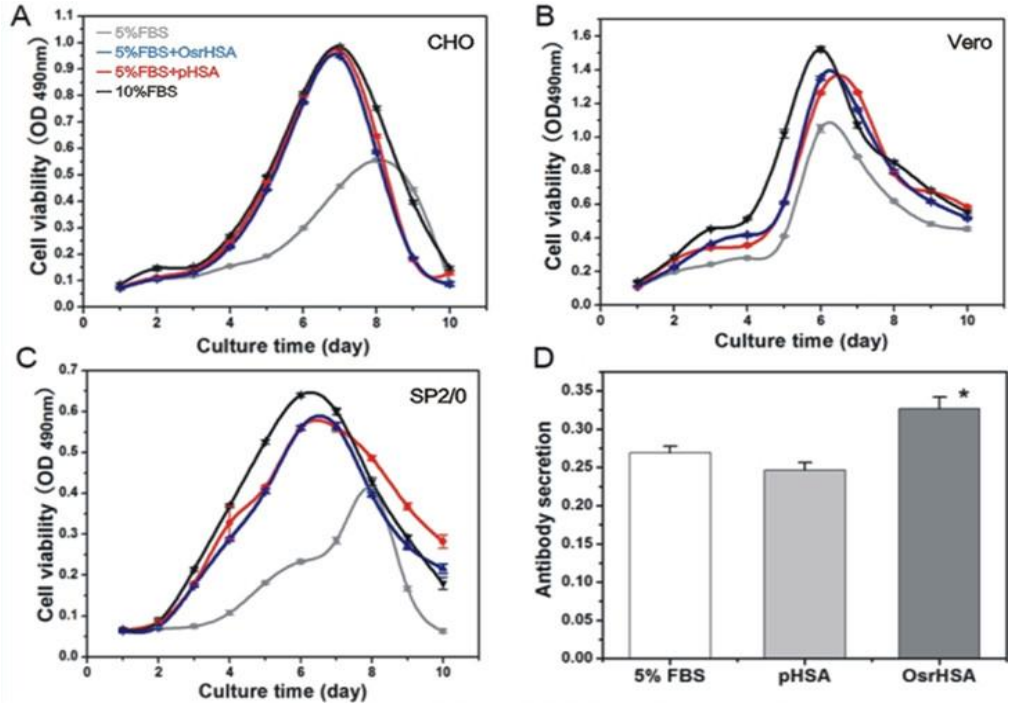
Different batches of ***OsrHSA*** was resolved with SDS-PAGE and visualized by silver staining, showing a single band at 66.5kDa and good batch consistency.

2. Comparison with commercial rHSA



Compared with the commercial rHSA, ***OsrHSA*** has no degradation fragment and fewer polymers.

3. Performance of OsrHSA in Promoting Cell Growth and Antibody Secretion



The levels of growth enhancement observed with ***OsrHSA*** and pHSA were nearly the same. The promotion of cell growth was comparable to that of CHO cells on 10% FBS. Specifically, OsrHSA showed a 20% increase in maximum viability and density compared with pHSA in Vero cells. Notably, the titer of antibody (IgG1+ κ) measured in the culture medium of SP2/0 cells supplemented with OsrHSA was significantly higher than that observed for the same cells supplemented with pHSA.

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