



Recombinant Human Serum Albumin, OsrHSA

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Source: Rice Grain (Oryza Sativa)

Catalog No. : HY100C1 (Lyophilized powder)
HY100C2 (Liquid, 20%)

DMF No.: #029648

Introduction

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

Specification

Physical Appearance: Off-white to light beige lyophilized powder (HY100C1)

Slightly sticky, yellow or brown transparent liquid (HY100C2)

Formulation: OsrHSA is purified by chromatography from gene-modified rice endosperm.

It is lyophilized with saline (HY100C1).

It is packaged in 50ml with 20% concentration (HY100C2).

Purity: More than 99.99% as determined by SDS-PAGE and HPLC analysis.

Endotoxin: Less than 0.01EU/mg

Preparation and Storage

Storage: Stored at temperature 2~8°C for at least 24 months.

Reconstitution: For the lyophilized OsrHSA (HY100C1), it is recommended to reconstitute in the sterile PBS. The OsrHSA liquid (HY100C2) can be made in other aqueous buffer.

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.

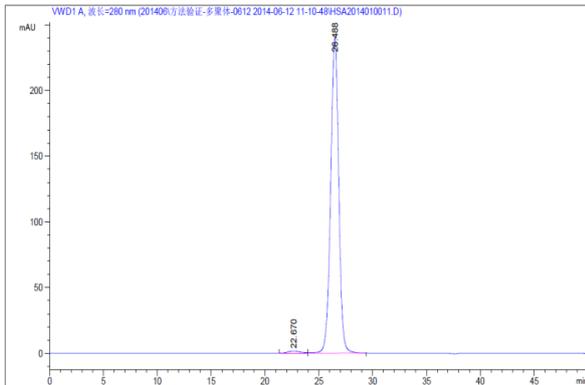
Stability and Activity in Culture: Providing consistent performance in cell culture media with lower cost and time consuming, especially in bioprocessing.

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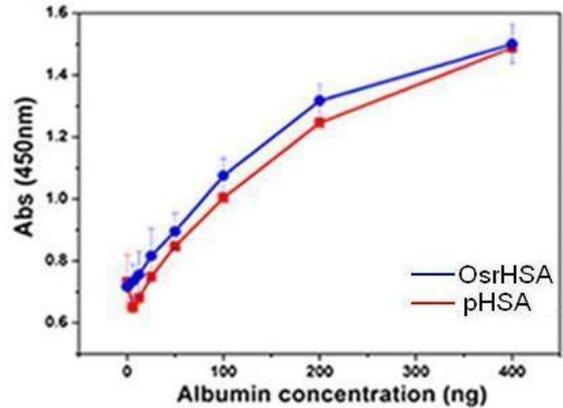
Data

1. HPLC Analysis



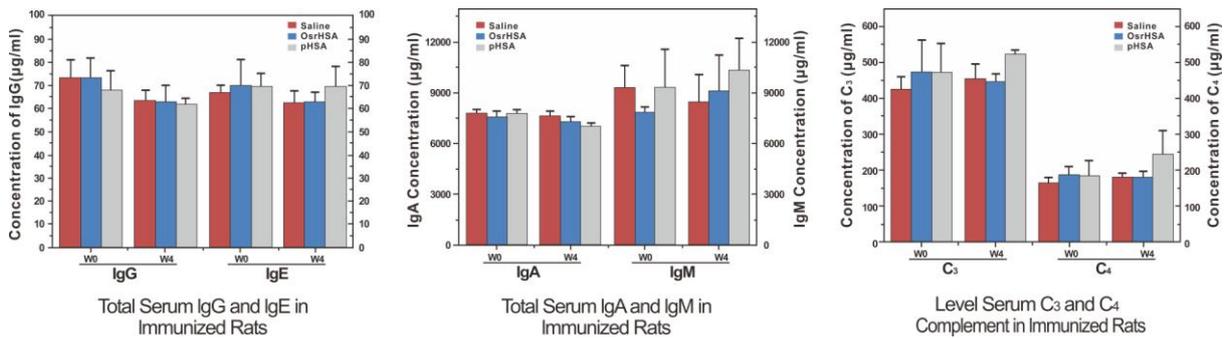
OsrHSA was analyzed by size exclusion chromatography HPLC (SEC HPLC), showing the purity is more than 99.99%.

2. Reactivity of anti-pHSA polyclonal antibodies



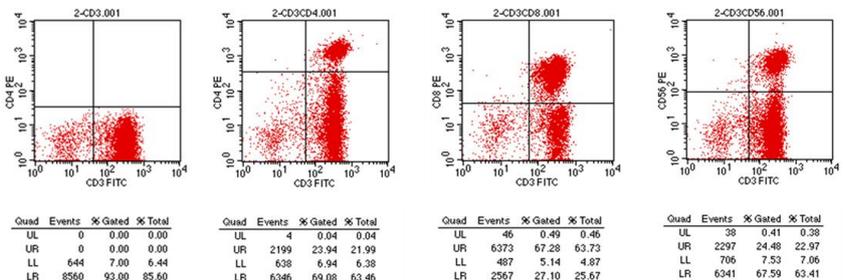
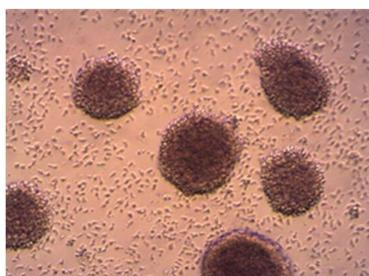
Reactivity of *OsrHSA* and pHSA against pHSA polyclonal antibody. In ELISA tests, polyclonal antibodies against pHSA reacted equally with *OsrHSA*.

3. *OsrHSA* has equal safety in vivo to pHSA



The titers of individual immunoglobulins IgG, IgM, IgE, and IgA showed no significant difference among the pHSA, *OsrHSA* and saline groups, and the titers of C4 complement were not significantly different.

4. Performance of *OsrHSA* in CIK Cell Therapy



OsrHSA was used in PBMC culture to induce the CIK cells. After 14 days, the total cell amount reach to 6.6×10^9 , and the CD3+CD56+ rate is more than 22.97%. It showed that *OsrHSA* has effective action in promoting CIK cell growth.