



## **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 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

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

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

**Endotoxin:** Less than 0.125EU/mg

### **Preparation and Storage**

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

**Reconstitution:** For the lyophilized OsrHSA, it is recommended to reconstitute in the sterile PBS with 200mg/ml concentration. The reconstituted OsrHSA liquid 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.

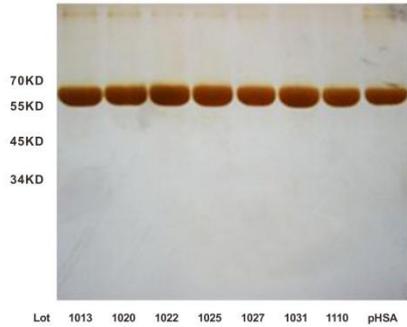
**Stability and Activity in Culture:** Providing consistent performance in cell culture media with lower cost and time consuming, especially in bioprocessing.

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

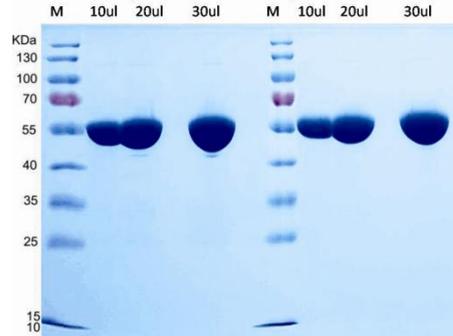


Data

1. SDS-PAGE



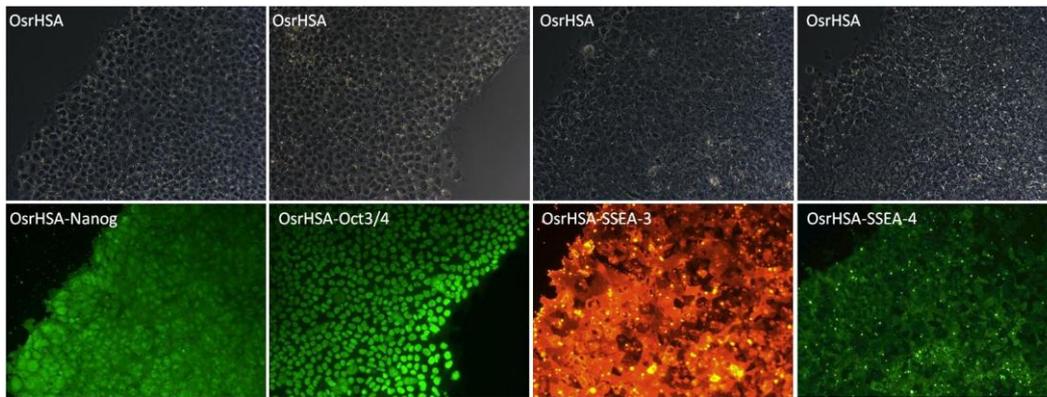
2. Comparison with commercial rHSA



Batches consistency of seven batches of **OsrHSA**. It presents in SDS-PAGE and visualized by silver staining, showing a single band at 66.5kDa

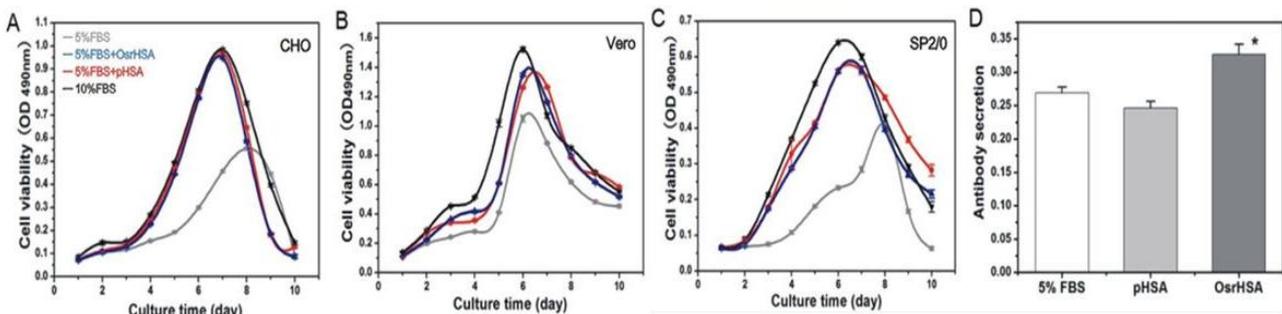
Compared with the commercial rHSA, **OsrHSA** has no degradation fragment and fewer polymers.

3. OsrHSA keeps iPS cells in an undifferentiated state



The immunofluorescent staining showed **OsrHSA** was effective in keeping undifferentiation and keeping viability of iPS cells.

4. Performance of OsrHSA in promoting cell growth and antibody production



The promotion of cell growth was comparable to that of CHO cells on 10% FBS. **OsrHSA** showed a 20% increase in maximum viability and density compared with pHSA in Vero cells. The titer of antibody (IgG1+κ ) measured SP2/O cells supplemented with **OsrHSA** was significantly higher than that supplemented with pHSA.