

Albumin

Learn how to make albumin powder.

Materials

Distilled Water (item #858621)
Commercial Egg
Mortar and Pestle (item #742892)
Stir Bar
Magnetic Stir Plate (item #701023)
Erlenmeyer Flask, 500-mL (item #731030)
Label
Boiling Chips (item #848280)

Don't want to make it yourself?

Find albumin powder at Carolina.com

Item Numbers

842251, 842252

Procedure

1. Beat the white of an egg with about 4 times the volume of water.
2. Filter.
3. Evaporate the water from the filtrate in a water bath at 50° C (122° F).
4. Powder the residue in a mortar.

Notes

- Albumin is also known as egg white.

Label Information

Albumin

Date Prepared: _____

Initials of Preparer: _____

Health Risk: 1

Flammability: 1

Reactivity: 0

Applications

Albumin consists of a family of globular proteins, the 2 most common being bovine serum albumin and human serum albumin. In humans, albumin is primarily synthesized in the liver. Albumins are commonly used as stabilizers of enzymes and other proteins. Albumin transports hormones, fatty acids, and other compounds, buffers pH, and maintains osmotic pressure, among other functions.

Reference

Boldt, J. 2010. Use of albumin: An update. *British Journal of Anaesthesia* 104 (3):276–84. doi:10.1093/bja/aep393.

Brandwein, P. F., and E. Morholt. 1986. *A sourcebook for the biological sciences*, 3rd ed. Orlando, FL: Harcourt Brace Jovanovich, 1986, pp. 247, 251.