

Product Information

CENTRICOLL[®]

Product Number **C0580**

Storage Temperature 2-8 °C

TECHNICAL BULLETIN

Product Description

Centricoll[™] is a new medium for density gradient centrifugation and it is very similar to Percoll[®] in its properties. It consists of colloidal silica coated with polyvinylpyrrolidone (PVP). The PVP coated silica is non-toxic and ideal for use in density gradient centrifugation of living cells and viruses and allows separation and recovery of intact biological materials.

PHYSICAL PROPERTIES:

Density: 1.1 (g/mL)

Conductivity (mS/cm): < 1.0

Osmolality (mOsm/kg H₂O): Approximately 25

Viscosity (cP): 10 ± 5

pH: 9.0 ± 0.5 at 20 °C

Preparation Instructions

Aseptically filtered solution

Storage/Stability

Store unopened bottles at 2-8 °C; store opened bottles at -20 °C. Centricoll[™] solution is stable to autoclaving but cannot be autoclaved after sucrose or salts have been added.

Procedure

GUIDELINES FOR USE:

* Centricoll[™] is best used in balanced salt solution (physiological saline or 0.25 M sucrose). A stock solution can be prepared by adding 9 parts (v/v) of Centricoll[™] to 1 part (v/v) of either 1.5 M NaCl or 2.5 M sucrose. The resulting solution has an osmolality of about 340 mOsm/kg H₂O.

* Solutions with different osmotic pressure can be produced by adjusting the relative volumes of Centricoll[™] and NaCl or sucrose solutions.

* When a precise osmotic pressure is required, it is best to measure the osmolality of the solutions with an osmometer.

* Centricoll[™] will form a self-generated gradient by centrifugation at approximately 10,000 x g in 0.15 M NaCl in a fixed angle rotor head for approximately 15 minutes.

* The density of Centricoll[™] gradients can be determined using color-coded Density Marker Beads (Product Code DMB-10).

* Centricoll[™] can be removed from the cells by diluting the mixture with saline and centrifuging to pellet the cells.

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