

Product Information

Cell Dissociation Sieve - Tissue Grinder Kit

Product Code **CD-1**

Product Description

The stainless steel cell dissociation sieve is designed to make single cell suspensions from tissue pieces. It has also been used to fragment polyacrylamide gels to recover antibody. The process is very similar to using a mortar and pestle to reduce a solid sample to a powder.

The sieve is a 85 ml cup. The screens are held in place by a retaining ring that is tightened in place by using the screen replacement key. The screens are stainless steel with various mesh sizes and a diameter of 37 mm diameter.

Product No. CD-1 Cell Dissociation Sieve Tissue Grinder Kit

The kit contains one 85 ml cup, 5 each of 40, 50, and 60 mesh screens, 5 screen replacement keys, and 2 glass pestles.

Individual Components:

Product No. S 1145 Screen Cup for CD-1

This is an 85 ml cup with retaining ring.

Product No. T 8279 Tissue grinder pestle for CD-1

This is a package of 2 glass pestles.

Product No. K 3878 Screen replacement key for CD-1

This is a package of 5 keys.

Screens for Product No. CD-1

Product No.	Mesh	Wire diameter (mm)	Opening size (µm)
S 0770	40	0.254	380
S 0895	50	0.229	280
S 1020	60	0.191	230
S 3770	80	0.140	190
S 3895	100	0.114	140
S 4020	150	0.066	104
S 4145	200	0.053	73.7

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Procedure

The following procedure outlines the most efficient method for making a single cell suspension from tissue pieces. For sterile applications, the screen and sieve are autoclaved or otherwise sterilized prior to use.

1. Select the appropriate size screen for the sample being processed and insert it into the opening on the cup. For the finer screens, a larger mesh screen can be used to hold the screen in place.
2. Insert the retaining ring into the threaded area with the slotted side up. Use the ring key to tighten the retaining ring to hold the screen in place. Do not use a wrench or other mechanical advantage to tighten as damage to the cup can result.
3. Place a small, thin piece of tissue sample in the cup and use the pestle to slowly grind the sample through the two screens. For best results, vary the angle and direction of the pestle each time it passes over the sample.
4. The cells are collected and a final rinse with a buffered solution (such as HBSS) is done to obtain all cells from the tissue.
5. The screens and cup can be cleaned by sonication or by soaking in a 2% aqueous solution of SigmaClean (Product No. S 4142) heated to 68 °C (will give off a ammonia smell) or by soaking in 10% bleach which, on extended use, will eventually oxidize (rust) the screens.

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