



# Matrix SPG™

## - Intended Use -

Matrix SPG™ is a specialized agarose gel designed for use in processing cytology specimens and delicate histology specimens.

## - General Information -

Matrix SPG™ has a unique property of liquefying and solidifying, to aide in the capture, retention, and protection of delicate tissues or cytology collections. Matrix SPG™ remains solid/semi-solid until heated above 65-70°C. Matrix SPG™ remains liquid until chilled below 35-40°C. This allows Matrix SPG™ to be heated above the liquefying temperature, cooled to a specimen safe 50-55°C, applied to the specimen and still remain solid for modern processors and wax infiltration.

## - Storage and Handling -

Matrix SPG™ does not require refrigeration. Matrix SPG™ should be stored at room temperature, away from direct sunlight. Keep container tightly closed. Some liquid may form at the top of the gel when stored after heading. This is normal, and will be reintroduced to the solution with the next heating cycle. We recommend heating with a water bath to 70°C; however microwave heating can also be used. Before heating, loosen the cap, and heat for no more than 5 seconds at a time. Regardless of heating method, agitate the solution to ensure all parts are equally melted. If the Gel is still clumpy, continue heating until clumps no longer remain.

## - Procedure -

### For Histology and Cytology Pellet Specimens:

1. Place specimen atop, Bio-Paper, CDI's Tri-Fold Paper, or other filter paper. Alternatively, instead of filter paper, specimen can be placed directly into a Vortex™ Cassette.\* Vortex™ Cassettes are designed to process Matrices and specimens, without any filter paper, directly in the cassette.
2. Completely cover specimen with liquefied Matrix SPG™.
3. Allow to cool completely. *Cooling may be aided with a cooling block or an indirect application of Freeze Spray.*
4. Insert specimen and filter paper into a biopsy cassette and process the specimen with your other regular histology specimens.
5. After processing, remove the specimen and Matrix SPG™ pellet from the filter paper. At this time you may choose to trim the pellet for orientation. Proceed with regular embedding and cutting.

### For Cytology Specimens by Centrifuge Tube Method:

1. Prepare specimen by preferred centrifuge method.
2. Remove supernatants.
3. Add 4-6 drops of Matrix SPG™ to the centrifuge.
4. Vortex manually or with equipment, the viscosity of Matrix SPG™ at 50-55°C is ideal for creating a matrix of cells.



5. Solidify the Matrix SPG™ by allowing it to cool. *Cooling can occur naturally or with ice, cooling blocks, or careful application of freeze spray.*
6. Once fully cooled to room temperature, add 6-10 drops of 95% ETOH to the centrifuge tube and gently loosen the edges of the gel pellet with a wooden stick. The pellet will slide out of the centrifuge tube. Transfer the Matrix SPG™ matrix pellet to a Tissue filter or other filter paper.
7. Completely cover specimen with liquefied Matrix SPG™.
8. Allow to cool completely. *Cooling can be aided with cooling blocks, or indirect application of freeze spray.*
9. Insert specimen and filter paper into a biopsy cassette and process the specimen with your other regular histology specimens.
10. After processing remove the specimen and Matrix SPG™ pellet from the filter paper. At this time you may choose to trim the pellet for orientation. Proceed with regular embedding and cutting.

## - Packaging -

Catalog#	Volume
SPG012	10mL, Squeeze Tube PK/12

Vortex™ Cassettes, are available from Cancer Diagnostics, Inc. in One-Piece (#VB1000) and Hinged (#VM1000) varieties.

