

# Substrate for Mouse Transplantation

## MatriMix for PDX

### Instruction

This product is a substrate for mouse transplantation consisting of collagen, hyaluronic acid, and laminin 511E8, and is designed as a patient-derived xenograft (PDX) model by suspending an equal volume of patient-derived cancer cells mixed in the medium.

#### **[Contents]**

MatriMix for PDX; 1 mL x 5 tubes

#### **[Storage and expiration date]**

Store at -20°C or below. Avoid multiple freeze-thaws.

Expiration date is one year after the manufacture date without opening and thawing the tubes.

#### **[Notes]**

1. This product is for research use only. It is not intended for clinical use. In the event of accidental ingestion or contact with skin, etc., wash immediately with large amounts of water, and seek medical advice.
2. Since this product contains collagen at neutral pH, it will quickly form a gel even at room temperature. Make sure to thaw it quickly in the refrigerator (2-8°C) or on ice. Once the product forms a gel, it will not return to solution.
3. When thawed under the appropriate conditions, only one refreeze is possible. Dispense into small portions according to the appropriate amounts to be used.

#### **[Instruction for use]**

##### **I. Thawing method**

1. Take this product out of the freezer and begin thawing in a refrigerator or on ice.
2. Check the thawing condition frequently. Be sure not to warm the tube with fingers.
3. If necessary, thawed product can be aliquoted and refrozen once. Multiple freeze-thaw cycles will result in partial gelation.

##### **II. Transplantation of cancer cells into mice**

Adjust the protocol according to the type of cells and mice, and transplantation tissue. The following is an example for subcutaneous transplantation of patient-derived cancer cells into immunocompromised mice. For this protocol, use a minimum of 75  $\mu\text{L}$  of this product and 1-10 x 10<sup>5</sup> cells for each mouse.

1. Prepare the required number of cells or spheroids according to the routine methods.
2. Mix the cells and medium to a total volume of 75  $\mu\text{L}$ , and cool on ice.
3. Mix 75  $\mu\text{L}$  of this product with 75  $\mu\text{L}$  of pre-cooled cell solution.

4. Fill a low dead volume syringe (ex. 27 G needle) with 100  $\mu$ L of the mixture.
5. Inject the cells subcutaneously into mice. Be careful not to inject air.
6. A tumor usually grows significantly after two weeks.

### **[Contact Information]**

If you have any questions, please visit <https://www.amsbio.com/matrimix/> or contact your local office of AMSBIO at [info@amsbio.com](mailto:info@amsbio.com).

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