

# Bubble Block Agarose antifoam agent

## I. Description

Bubble Block is an antifoam agent for controlling the generation of foam when preparing agarose gel. By adding an appropriate amount of this product when preparing the agarose gel, the generation of foam at boiling is controlled, and the risk of the gel boiling over from the container can be greatly reduced.

## II. Storage Temperature

Room temperature

## III. Protocol

1. Choose a beaker or flask with a volume 2-3 times greater than that of the agarose gel to be prepared.
  2. Add the premeasured of agarose powder and 1x or 0.5x electrophoresis buffer to the beaker, and mix them thoroughly.
  3. **Vigorously shake the Bubble Block for a few seconds until the solution becomes turbid.** \*1)
  4. Invert the Bubble Block after taking off the cap and drip an appropriate amount into the beaker \*2), \*3)
  5. Heat in a microwave oven to melt agarose. \*4), \*5)
- \*1) When the remaining amount is low, mixing becomes difficult. Use a Vortex Mixer to mix well.
- \*2) One drop is about 30  $\mu$ l. Refer to the Example of Use for appropriate amount for each gel type and concentration.
- \*3) If a large excess amount of the Bubble Block is applied, agarose gel may become turbid in white. Also, if the applied loading buffer does not contain EDTA, a white band may appear in the gel after electrophoresis. However, this does not affect the result of electrophoresis.
- \*4) The recommended wattage for the microwave oven is 500-600 W.
- \*5) If there is a risk of boiling over, temporarily interrupt heating in the microwave oven.

## IV. Cautions

Bubble Block does not guarantee the prevention of boiling over during agarose gel preparation. The antifoam effect can vary depending on the type and concentration of agarose and buffer, the size and shape of the container and wattage of the microwave oven.

## V. Example of Use

### ① Standard type Agarose Hard type Agarose

Preparation condition: 50 ml of agarose gel (TAE) is prepared in a 100ml Erlenmeyer flask (2x volume of the gel)

Gel conc.	0.5%	1%	2%	3%
Applied volume	-	1 drop	1 drop	1 drop

### ② Small Fragment type Agarose

Preparation condition: 50 ml of agarose gel (TAE) is prepared in a 100ml Erlenmeyer flask (2x volume of the gel)

Gel conc.	0.5%	1%	2%	3%	4%	5%
Applied vol.	1 drop	1 drop	1 drop	1 drop	1 drop	2 drops

### ③ Low Melting Point type Agarose

Preparation condition: 30 ml of agarose gel (TAE) is prepared in a 100ml Erlenmeyer flask (3.3x volume of the gel)

Gel conc.	0.5%	1%	2%	3%	4%	5%
Applied vol.	1 drop	1 drop	1 drop	1 drop	2 drops	2 drops

\* If TBE is used in preparation of gel, double a volume of Bubble Block to be applied.

For research use only.

Not for use in diagnostic or therapeutic purpose.