

# PEG/Tacsimate™ pH 7.8 Crystallization Reagent for Silver Bullets™

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RESEARCH**

Solutions for Crystal Growth

## User Guide

HR2-094

### Description

- 1 milliliter of reagent filled in a 96 Deep Well block.
- Thermal sealed.

### Storage

Store between -20 and 4 degrees Celsius. May be stored at room temperature for up to 30 days. For best results, allow block to equilibrate to 25 degrees Celsius (room temperature) before removing seal. After use, seal the block using either AlumaSeal II Sealing Film (HR8-069) or for best results, the block should be sealed using a thermal sealer.

### Application

PEG/Tacsimate pH 7.8 Crystallization Reagents for Silver Bullets is designed for use as the crystallization reagent with the Silver Bullets kits. Refer to the Silver Bullets kit User Guide for information about how the PEG/Tacsimate pH 7.8 Crystallization Reagent is used with the Silver Bullets.

**Crystallization Reagent** refers to the solution that appears in both the reagent well (reservoir) and the crystallization drop. This reagent is sometimes called **precipitant, crystallant, dehydrant, or well solution.**

### Related Products

<b>HR2-078</b>	Silver Bullets kit	0.25 ml, Tube format
<b>HR2-096</b>	Silver Bullets HT kit	250 ml, Deep Well Block
<b>HR2-078</b>	Silver Bullets Bio kit	0.25 ml, Tube format
<b>HR2-096</b>	Silver Bullets Bio HT kit	250 ml, Deep Well Block
<b>HR2-527</b>	50% w/v Polyethylene glycol 3,350	200 ml
<b>HR2-993-16</b>	1.0 M BIS-TRIS propane pH 7.8	185 ml
<b>HR2-829</b>	100% Tacsimate pH 8.0	200 ml
<b>HR2-849</b>	25% w/v Polyethylene glycol 3,350, 0.1 M BIS-TRIS propane pH 7.8	100 ml
<b>HR2-851</b>	55% v/v Tacsimate pH 8.0, 0.1 M BIS-TRIS propane pH 7.8	100 ml
<b>HR8-069</b>	AlumaSeal II Sealing Film	Pack of 100

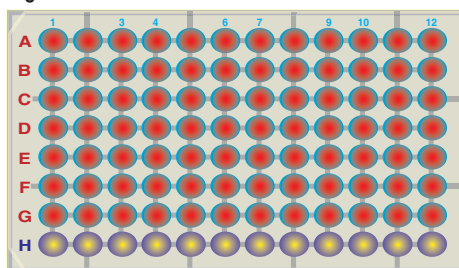
### Formulation

#### Reagent A1 - G12

25% w/v Polyethylene glycol 3,350,  
0.1 M BIS-TRIS propane pH 7.8

See Figure 1 ◊

Figure 1 ◊



#### Reagent H1 - H12

55% v/v Tacsimate pH 8.0,  
0.1 M BIS-TRIS propane pH 7.8

See Figure 1 ◊

◊ The reagent color featured in Figure 1 are for illustration purposes only.

### Recommended Stock Solutions

#### Polyethylene glycol 3,350

- Synonyms: PEG 3,350
- Formula:  $H(OCH_2CH_2)_nOH$
- Formula Weight: 3,300 - 3,400
- CAS Number: [25322-68-3]
- EC Number: 500-038-2
- Merck: 13,7651

\* 50% w/v Polyethylene glycol 3,350 (HR2-527) can be used to reproduce HR2-094 reagents A1 - G12.

#### Tacsimate pH 8.0

A pH titrated mixture of organic acids.

- 1.8305 M Malonic acid
- 0.25 M Ammonium citrate tribasic
- 0.12 M Succinic acid
- 0.30 M DL-Malic acid
- 0.40 M Sodium acetate trihydrate
- 0.50 M Sodium formate
- 0.16 M Ammonium tartrate dibasic
- pH adjusted to 8.0 using NaOH

\* 100% Tacsimate pH 8.0 (HR2-829) can be used to reproduce HR2-094 reagents H1 - H12.

#### BIS-TRIS propane pH 7.8

- Synonyms:
  - 1,3-Bis[tris(hydroxymethyl)methylamino]-propane
- pH adjusted to 7.8 using HCl
- Formula:  $C_{11}H_{26}N_2O_6$
- Formula Weight: 282.34
- CAS Number: [64431-96-5]
- EC Number: 264-899-3
- Beilstein Registry Number: 1786109

\* 1.0 M BIS-TRIS propane pH 7.8 (HR2-993-16) can be used to reproduce HR2-094 reagents A1 - H12.

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