How to make a 1 M PMSF Stock Solution

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Abstract

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Guidelines

PMSF is hygroscopic and is highly unstable in aqueous solutions. A typical working solution of PMSF is 1mM.

PMSF is an anti-protease! Do not allow to come into contact with skin.

PMSF is inactivated in aqueous solutions. The rate of inactivation increases with increasing pH and is faster at 25°C than at 4°C. The half-life of a 20mM aqueous solution of PMSF is ~35 minutes at pH 8.0. This short half-life means that aqueous solutions of PMSF can be safely discarded after they have been rendered alkaline (pH >8.6) and stored for several hours at room temperature.

Materials

PMSF RP-P20270 by P212121

Protocol

Step 1.
Weigh 1.74 g PMSF

AMOUNT
2 g Additional info:

REAGENTS
PMSF RP-P20270 by P212121

DURATION
00:03:00

Step 2.
Add DMSO to a final volume of 100 ml.

Dissolve completely.

REAGENTS

DMSO GB-D-360 by P212121

DURATION

00:03:00

Step 3.

Stocks may be kept at -20°C for up to 6 months.

PMSF is used at a final concentration of 0.1- 1.0 mM

REAGENTS

PMSF RP-P20270 by P212121