

**Data sheet**

This data sheet provided for information only

# 100mM MgCL<sub>2</sub> Stock Solution

**RESEARCH USE ONLY**

<b>Cat.No.</b>	<b>Pack</b>	<b>Conc.</b>
<b>SMG1-1</b>	<b>1ml</b>	<b>100mM</b>
<b>SMG1-5</b>	<b>5ml</b>	<b>100mM</b>

**Stability:**

Shelf life 12 months if store at -20°C

**CONTENT:****100mM MgCL<sub>2</sub>** in water

Sterile

**DESCRIPTION****100mM MgCL<sub>2</sub> Stock Solution**

**Mg ions** is an essential Co-factor in many Polymerases and it is included in the polymerase chain reaction (PCR) buffers

**Quality:**

The **100mM MgCL<sub>2</sub> Stock Solution** is prepared in sterile water, sterile filtered and autoclaved. for Molecular Biology, DNase free

**Recommended PCR assay**

<b>50µl PCR assay</b>		<b>Final Conc.</b>
0.5µl	DiaTaq/SmarTaq Pol	2.5U
10µl	<b>5X Ampli Buffer</b>	1X
0.75-1.25µl	50mM MgCl <sub>2</sub> Solution	1.5-2.5mM
4µl	2.5mM dNTP's MIX	0.2mM each
0.2-1.0µl	each Primer	
Variable*	DNA Template	
To 50µl	PCR Grade Water	

\*- depending on DNA template initial concentration  
For 25µl PCR assay, all reagents should be reduced proportionally.

**APPLICATIONS:**

- Routine PCR
- Primer extension
- DNA sequencing
- Low-copy PCR (SmarTaq Polymerase)
- Multiplex PCR

**STORAGE CONDITIONS :**

Store **100mM MgCL<sub>2</sub> Stock Solution** at -20°C (for long-term storage).

**SHIPPING CONDITIONS:**

Should be shipped at ambient temperature