

### Different types of Taq Polymerase available:

Sr.No	Product Code	Description	Concentration
1	MBT060	10X Buffer A 10X Buffer S 50mM MgCl <sub>2</sub> Enzyme vial	5 Units / µl
2	MBT060A	10X Buffer A with MgCl <sub>2</sub> 10X Buffer S 50mM MgCl <sub>2</sub> Enzyme vial	5 Units / µl
3	MBT060B	10X Buffer A 10X Buffer S 50mM MgCl <sub>2</sub> Enzyme vial	3 Units / µl
4	MBT060C	10X Buffer A with MgCl <sub>2</sub> 10X Buffer S 50mM MgCl <sub>2</sub> Enzyme vial	3 Units / µl
5	MBT060D	10X Buffer A 10X Buffer S 50mM MgCl <sub>2</sub> Enzyme vial	1 Units / µl
6	MBT060E	10X Buffer A with MgCl <sub>2</sub> 10X Buffer S 50mM MgCl <sub>2</sub> Enzyme vial	1 Units / µl

### Hi-Proof DNA Polymerase

#### Description:

Hi-Proof DNA Polymerase is an extremely thermostable polymerase from the *hyperthermophilicarchaeum Pyrococcusfuriosus*. Hi-Proof DNA Polymerase catalyzes the polymerization of nucleotides into duplex DNA in the 5' to 3' direction in the presence of Mg<sup>2+</sup>. It exhibits the 3' to 5' exonuclease (Proofreading) activity that enables the polymerase to correct nucleotide incorporation errors resulting in over 10-fold higher fidelity than possible with Taq DNA Polymerases. It has no 5'≥3' exonuclease activity.

#### Applications:

- High fidelity PCR.
- Generation of PCR products for cloning and expression.
- RT-PCR for cDNA cloning and expression.
- Blunt-end PCR cloning
- Site-directed mutagenesis.

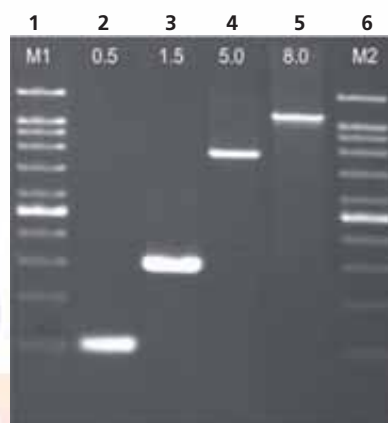


Fig. No 41 b : Figure representing amplicon sizes obtained using Hi-Proof DNA Polymerase (MBT068)

### Hi-Temp DNA Polymerase

#### Description:

Hi-Temp DNA Polymerase is a complex of specific anti-Taq monoclonal antibody with best quality thermostableTaq DNA Polymerase for automatic "hot start" amplification, resulting in greatly enhanced amplification specificity, sensitivity and yield. Hi-Temp DNA Polymerase catalyses the polymerization of nucleotides into duplex DNA in the 5'-3' direction in the presence of Mg<sup>2+</sup> and has the 5'-3' exonuclease activity.

#### Applications:

- High throughput hot start PCR
- RT-PCR
- Highly specific amplification of genomic and cDNA targets up to 3 kb
- Amplification of low copy DNA targets
- Real-time PCR
- Multiplex PCR
- Generation of PCR product for TA cloning

Lane	Amplicon Size	Hi-Proof DNA Polymerase Concentration	dNTP Concentration	Formamide Concentration
1	M1-1Kb Ladder			
2	0.5Kb	1.25U	0.2mM	NA
3	1.5Kb	1.25U	0.2mM	NA
4	5.0Kb	1.25U	0.25mM	3%
5	8.0Kb	1.25U	0.25mM	3%
6	M2-1Kb Ladder			