AddStart Taq DNA Polymerase

Research Use Only

Product Code

18101X

Component

1. AddStart Taq DNA Polymerase (2.5 U/μl) 1,000 units, 400 μl
2. 10x Reaction Buffer (without Mg) 1.2 ml x 2 tubes
3. 25mM $MgCl_2$ 1.2 ml x 2 tubes

Storage Condition

Store at -20℃

Description

AddStart Taq DNA Polymerase is a highly thermostable recombinant DNA polymerase derived from the thermophile, *Thermus aquaticus,* and is a hot-start Taq DNA Polymerase by specific anti-Taq monoclonal antibody.
AddStart Taq DNA polymerase catalyzes the 5′→3′ synthesis of DNA but has no detectable 3′→5′ proofreading exonuclease activity, and possesses low 5′→3′ exonuclease activity, which results in a 3′-dA overhang on the PCR product.
Especially, this enzyme can be applied to multiplex PCR, allele specific PCR, SNP analysis and real-time PCR by fluorescent intercalating dye like SYBR Green I® and TaqMan® Probe.

Storage Buffer

20mM Tris-HCl (pH8.0), 100mM KCl, 1mM DTT, 0.1% Nonidet P-40, 0.1% Tween® 20 and 50% (v/v) glycerol

10X Reaction Buffer

100mM Tris-HCl (pH8.8), 500mM KCl and 1% Triton® X-100

Storage and Stability

AddStart Taq DNA Polymerase is stable for 2 years when stored in a constant temperature freezer at less than -20℃.

Made in KOREA This product was manufactured through ISO 9001 & 13485 system.

Nucleic Acid Amplification Protocol

1. Add the following components to a thin-walled PCR tube:

Nuclease-Free Water	x µl
10x Reaction Buffer (w/o Mg)	2.0 µl
10mM dNTP Mixture	2.0 µl
25mM MgCl2	1.0~4.0 µl
Forward primer (10µM)	0.25~2.0 µl
Reverse primer (10µM)	0.25~2.0 µl
DNA template	x µl
AddStart Taq DNA Polymerase (2.5 U/µl)	0.4 µl
Total reaction volume	20µl

* Recommendation for template DNA concentration in a 20 µl reaction volume
  1) Human genomic DNA: 0.1 ng ~ 1 µg
  2) Bacterial genomic DNA: 0.1 ng ~ 100 ng
  3) Plasmid DNA: 0.01 ng ~ 5 ng

2. PCR cycling

Initial Denaturation	95℃, 10 min
PCR Cycling (25 – 40 cycles)	95℃, 15 – 30 sec
	55 - 65℃, 15 – 30sec
	72℃, 30 sec per kb of product length
Final Extension	72℃, 5 min
Hold	12℃, ∞

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