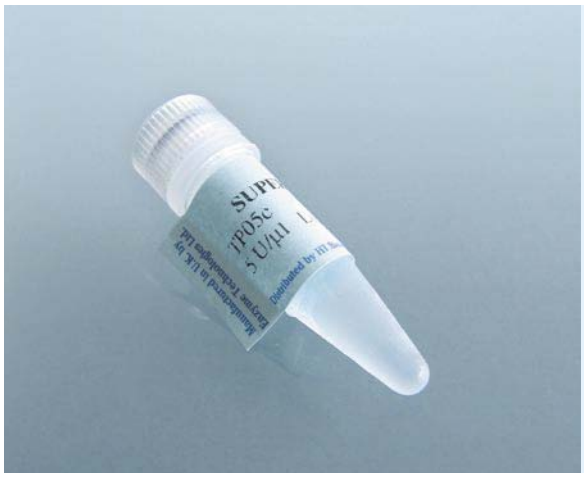
Super Taq

Super Taq standard concentration (5 U/µl) is mostly used in standard PCR experiments, producing good results with diluted Super Taq. Although the enzyme is isolated from a strain other than *Thermus aquaticus* YT1, it has very similar properties to its YT1 counterpart. It has good thermal stability and retains substantial activity after repeated cycles of heating and cooling. The enzyme shows no 3' to 5' and 5' to 3' exonuclease activity.



The accompanying picture shows that Super Taq successfully amplifies the 506 bp fragment in the presence of only 0.05 units of enzyme.

Super Taq is supplied with a protocol and with the standard Super Taq Reaction Buffer.

1 2 3

1
0.2 units
Super Taq
2
0.1 units
Super Taq
3
0.05 units
Super Taq

Concentration
5 U/µl

Unit Definition
One unit of enzyme is defined as the amount that will, under the assay conditions described below, incorporate 10 nmol of dNTPs into acid-insoluble material per 30 minutes at 74 °C.

Assay Conditions
25 mM TAPS (tris-(hydroxymethyl)-methyl-amino-propanesulfonic acid, sodium salt), pH 9.3 (at 25°C); 50 mM KCl; 2 mM $MgCl_2$; 1 mM ß-mercaptoethanol; 200 µM each dATP, dGTP, dCTP, dTTP; 0.5 mg/ml activated salmon sperm DNA.

Storage Buffer
50 mM Tris-HCl, pH 8.0, 1 mM EDTA, 1 mM DTT, 50% (v/v) glycerol, stabilizers.

Storage Temperature
-20°C. Do not store in frost-free freezer.

Quality Control Assay
The enzyme was tested for the absence of endo-nuclease and exonuclease activities. It is greater than 95% physically pure by SDS gel electrophoresis analysis. Each batch of Super Taq is assayed for amplification by PCR of the 506 bp fragment of the *Thermus thermophilus* RNase H gene.

Ordering information

Order Nr	Product	Description	Packaging
TP05a	Super Taq	Taq DNA polymerase 5u/µl	500 units
TP05b	Super Taq	Taq DNA polymerase 5u/µl	1.000 units
TP05c	Super Taq	Taq DNA polymerase 5u/µl	5.000 units
TPRB	Reaction Buffer	Reaction Buffer	5 x 1 ml
TPSB	Storage Buffer	Storage Buffer	5 x 1 ml

[1] PCR process is covered by patents owned by Hoffmann-La Roche, Ltd.