

Super Taq Plus

Super Taq Plus, currently one of the most popular HT Biotechnology products, is typically used in cloning and expanded PCR experiments.

Super Taq Plus is a mixture of two thermostable DNA polymerases: Super Taq and an enzyme with proofreading activity². This proofreading enzyme corrects the mis-incorporations of Super Taq, which lacks this editing function, thus enabling Super Taq to elongate. Super Taq Plus can amplify fragments of human genomic DNA up to 20 kb and fragments of lambda DNA up to 25-30 kb.



Features

- Ability to amplify up to 20 kb using lambda DNA as substrate
- Increased yield of amplification of shorter fragments, thus reducing the amount of enzyme required
- Reduced error of incorporation due to the proofreading activity; recommended for cloning experiments
- The same buffer system as Super Taq

Super Taq Plus will be supplied with a protocol and with the standard Super Taq buffer.

Concentration

5 U/μl

Unit Definition

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

Assay Conditions

25 mM TAPS (tris-(hydroxymethyl)-methyl-amino-propanesulfonic acid, sodium salt), pH 9.3 (at 25°C); 50 mM KCl; 2 mM MgCl₂; 1 mM β-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 endonuclease and exonuclease activity. It is more 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 |
|----------|-----------------|--------------------------|-------------|
| TP10a | Super Taq Plus | Taq DNA polymerase 5u/μl | 500 units |
| TP10b | Super Taq Plus | Taq DNA polymerase 5u/μl | 1.000 units |
| TP10c | Super Taq Plus | 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 |