**USB® VeriQuest® Taq DNA Polymerase**

- Chemically modified Taq polymerase for hot start PCR
- Minimize the amplification of non-specific products and primer dimers
- Exceptional performance, offering high specificity and sensitivity
- Room temperature reaction set-up

USB VeriQuest Taq DNA Polymerase is a highly purified, hot start Taq polymerase that has no polymerase activity prior to the initial heat activation step, ensuring there is no amplification of non-specific primers, such as primer-dimers. This feature allows the convenience of reaction assembly at room temperature as well as higher specificity and sensitivity. The initial incubation step of 95°C for 10 minutes before PCR cycling removes the blocking chemical moiety resulting in activation of the polymerase.

**Properties:**
VeriQuest Taq DNA Polymerase is a chemically modified, full length Taq DNA polymerase for hot start.

**Purity:**
Free from detectable non-specific nucleases.

**Storage buffer:**
20 mM Tris-HCl, pH 8.5, 100 mM KCl, 1 mM DTT, 0.1 mM EDTA, 50% glycerol and stabilizers.

**Unit definition:**
One unit of enzyme is defined as the amount that catalyzes the incorporation of 10 nmol of total nucleotide into acid-insoluble form in 30 minutes at 74°C.

**Assay conditions:**
The reaction mixture contains 25 mM TAPS, pH 9.3 (at 25°C), 50 mM KCl, 2 mM MgCl₂, 1 mM β-ME, 200 μM each dATP, dGTP, dTTP, 100 μM [α-32P]-dCTP (0.05 to 0.1 Ci/mmmole), 250 μg/ml activated salmon sperm DNA, and VeriQuest Taq DNA Polymerase. After incubation at 74°C for 10 minutes, acid insoluble material is determined (50 μl reaction volume).

**Concentration:**
5 units/ul

**Buffers:**
- Functionally Tested VeriQuest Taq 10X PCR Reaction Buffer (included, PN 71188):
  150 mM Tris-Cl, pH 8.0, 500 mM KCl, 15 mM MgCl₂
- Functionally Tested MgCl₂ (included, PN 71167):
  25 mM MgCl₂ solution

**Storage:**
Shipped on dry ice. Store at -20°C.

**VeriQuest Taq DNA Polymerase**

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<thead>
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<th>Product code</th>
<th>Pack size</th>
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