

EU-Taq DNA Polymerase

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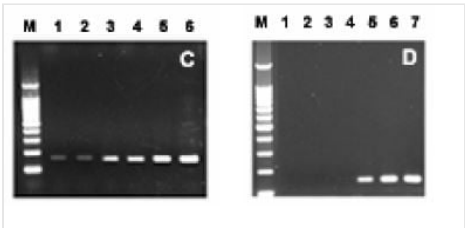
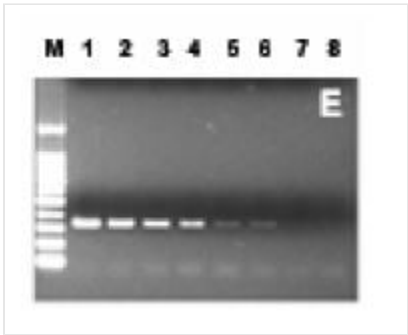
CATALOG #
AAA13739

PRODUCT SYNONYMS

EU-Taq DNA; EU-Taq DNA Polymerase; EU-Taq DNA Polymerase; highly purified; EU-Taq DNA polymerase

PRODUCT SPECIFICATIONS

Form/Format	20 mM Tris-HCl buffer (pH 8.0), 100 mM KCl, 0.1 mM EDTA, 0.5 mM PMSF, 1 mM DTT, 50% glycerol (v/v)
Concentration	5 units/ul (varies by lot)
Application Notes	High-throughput genotyping/screening Multiplexed genotyping Quantitative Real-time PCR Nested PCR
Quality Control	EU-Taq is highly purified without any detectable endonucleases, exonucleases and "nicking activity. The enzyme is also bacterial DNA free (no amplification of bacterial gene detected after 35 cycles).
Unit Definition	One unit incorporates 10 nmole of dNTP into acid-insoluble material in 30 min. at 74°C.
10 x Reaction Buffer(without Mg ²⁺)	670 mM Tris-HCl (Ph 8.8), 160 mM (NH ₄) ₂ SO ₄ , 0.1% Tween 20.
Magnesium Chloride	100 mM MgCl ₂ . The final magnesium concentration may be variable according to individual applications. In general, 2.5 mM MgCl ₂ is recommended.
Contents	A: EU-Taq (5 U/ul); 1 vial (100 ul) B: 10x PCR buffer (no Mg ²⁺); 1 vial (1.5ml) C: 100mM MgCl ₂ ; 1 vial (1 ml).
Preparation and Storage	Store at -20°C in a constant temperature freezer.

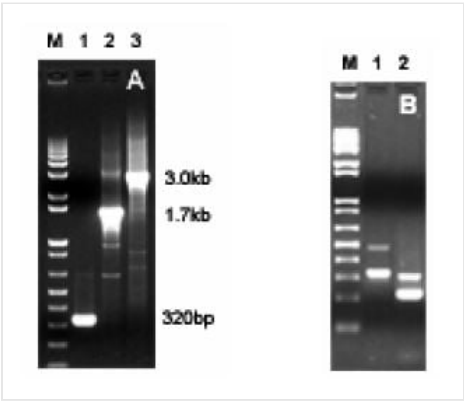


Application Data

Figure A, Amplification of genomic DNA; using EU-taq with various primer set. PCR; conditions: 9 4 degree C x 2'; 9 4 degree C x 45", 55 oC x; 45", 72 oC x 30"-3', for 30 cycles. Figure B, Duplex PCR amplification. Lane1,; allele specific genotyping of human PAX6; mutation, 490bp-mutant band, 320bp-wild; type band; Lane2, two primer sets targeted; to ALDH3 gene (200bp) and SHH (Sonic; Hedgehog) gene. PCR conditions: 9 4 degree C x; 2'; 9 4 degree C x 30", 55 oC x 30", 72 oC x 30", for; 30 cycles. Figure C and D, Titration of enzyme; concentration in 25 mul PCR reaction (C, EUtaq,; D, Taq from other company). Lane M,; 100-bp maker, lane1, 0.01 U; lane2, 0.02 U;; lane3, 0.1 U; lane4, 0.2 U; lane5, 0.5 U;; lane7, 1 U.; PCR conditions: 9 4 degree C x 2'; 9 4 degree C x 30", 55; oC x 30", 68 oC x 30", for 25 cycles. Figure E, Titration of plasmid DNA; concentration in 25 mul PCR reaction. Lane; M, 100-bp marker, lane1, 1 ng; lane2, 0.1; ng; lane3, 0.01 ng; lane4, 5 pg; lane5, 1 pg;; lane6, 0.5 pg; lane7, 0.1 pg; lane8, 0.01 pg.; PCR conditions: 9 4 degree C x 2'; 9 4 degree C x 30", 55; oC x 30", 72 oC x 30", for 25 cycles.

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ADDITIONAL INFORMATION

Related Product Information for EU-Taq DNA polymerase	Description: EU-Taq is a thermostable DNA polymerase isolated from a strain of Thermus sp. It has an increased half-life of 3 hours at 95 degree C and 10 fold higher fidelity than other competitive Taqs (error rate: 1 x 10-6). EU-Taq has excellent performance in genomic DNA amplification with variety of primer sets.
Product Categories/Family for EU-Taq DNA polymerase	Taq DNA Polymerases

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polymerase/eu-taq-dna/13739>