

<b>Catalog Number:</b>	Catalog #	Amount	Concentration
	OX-001S	100 U	5 U/μl
	OX-001M	200 U	5 U/μl
	OX-001L	500 U	5 U/μl

**Product Description:** Oxone® Taq Polymerase is a highly processive, thermo stable enzyme. It is purified from E. coli strain that carries an overproducing plasmid, containing gene of Thermus Aquaticus DNA polymerase. The enzyme has 5' to 3' polymerization-dependent exonuclease replacement activity but lacks 3' to 5' exonuclease activity. Optimized for 100-300 mM dNTP, 1.5-3.0 mM MgCl<sub>2</sub> concentrations.

**Storage Conditions:** Viable for 12 month at -20°C after production date.

**Concentration:** 5 U/μl

**Unit Definition:** One unit is defined as the amount of enzyme which incorporates 10 nM of dNTPs into acid-insoluble material in 30 minutes at 72°C

**Reagents Provided:**

- Oxone® Taq Polymerase.
- 10x Reaction Buffer 1 (with Mg<sup>2+</sup>). 100 mM Tris-HCl (pH 8.8); 500 mM KCl; 0.8% (v/v) Nonidet P40, 150mM MgCl<sub>2</sub>.
- 10x Reaction Buffer 2 (Mg<sup>2+</sup> free). 100 mM Tris-HCl (pH 8.8); 500 mM KCl; 0.8% (v/v) Nonidet P40.
- 25 mM MgCl<sub>2</sub>.
- RNase-free H<sub>2</sub>O.

**Storage Buffer:** 50 % Glycerol (v/v), 20 mM Tris-HCL (pH 8.7), 100mM KCl, 0.1 mM EDTA and stabilizers

**Quality Control:** Enzyme is free of nicking and priming activities, exonucleases and non-specific endonucleases. Purity evaluated by SDS-PAGE, giving 92 kDa single band, >98% pure. Activity and stability tested via thermo-cycling.

**Passes Quality Control Requirement:**

**Date, Signature**