

Vita DxTaq® DNA Polymerase is Taq DNA polymerase suitable for all common PCR applications like colony PCR, cloning applications, high-throughput PCR and routine PCR. Its antibody-mediated HotStart feature allows for reaction setup at room temperature and grants full control over the reaction start. As Vita DxTaq® DNA Polymerase is **free from bacterial, viral and human DNA**, it is the best choice for applications that use bacterial DNA as template.

PRODUCT	SIZE	SKU
Vita DxTaq® HS PCR Kit	100 units	TRAXSKU1035
	500 units	TRAXSKU1036
	2500 units	TRAXSKU1037

STORAGE CONDITIONS

Store all components at -20°C and avoid repeated freeze and thaw cycles.

ADDITIONAL MATERIALS REQUIRED

Nuclease free dH₂O
Nuclease free PCR tubes / plates & sealing options
Thermocycler
PCR Primer (10 µM each)
dNTP Mix (10 mM each)
template DNA

REACTION SETUP

1) Thaw all reaction components completely and mix gently to ensure even distribution off all components. Prepare the reaction in a sterile, nuclease free tube and mix gently after addition of the polymerase. Collect all liquid at the bottom of the tube by a quick spin.

COMPONENT	VOLUME	FINAL CONCENTRATION
10X PCR Buffer	5 µl	1X
dNTP Mix (10 mM each)	0.5 µl	0.1 mM each
Primer 1 (10 µM)	1 µl	0.1 µM – 0.5 µM
Primer 2 (10 µM)	1 µl	0.1 µM – 0.5 µM
Vita DxTaq® DNA Polymerase (2 U/µL)	0.5 µl	1 U
template DNA	1 µl	<1 µg
dH ₂ O	to 50 µl	

2) Cycle according to these guidelines:

STEP	CYCLES	TEMPERATURE	DURATION
Initial Denaturation	1	94°C	5 minutes
Amplification	30-35	94°C	30 seconds
		T _m – 5°C	30 seconds
		72°C	1 minute / kb
Final Extension	1	72°C	5 minutes
Hold	1	4°C	

3) Analyse the amplification reaction by gel electrophoresis using an acrylamide or agarose gel of appropriate percentage.