

Improve microbiome studies

Help minimize false signals in microbial PCR

Platinum DNA polymerases with low residual DNA

The residual bacterial DNA in recombinant PCR enzymes poses challenges in microbial genome analysis, such as accurately detecting bacterial strains by 16S rRNA gene sequences. With stringent quality control during manufacturing, Invitrogen™ Platinum™ DNA polymerases are certified for controlled low levels of residual bacterial and human genomic DNA (gDNA), enabling confidence and success in microbial PCR assays.



Choose the Platinum DNA polymerase that best suits your specific needs

	Platinum™ II Taq Hot-Start DNA Polymerase	Platinum™ Taq DNA Polymerase, DNA-free	Platinum™ SuperFi™ II DNA Polymerase
Residual bacterial gDNA (per 50 µL reaction)	≤1 copy	≤0.01 copy	≤1 copy
Residual human gDNA (per 50 µL reaction)	≤0.2 copy	≤0.001 copy	≤0.3 copy
Hot start for enhanced specificity	Yes	Yes	Yes
Fidelity (vs. Taq polymerase)	1x	1x	>300x
Inhibitor tolerance	High	Low	High
DNA synthesis rate	15 sec/kb	60 sec/kb	15–30 sec/kb
GC-rich amplification	Yes	No	Yes (no GC enhancer needed)
Buffer formulated for primer annealing at 60°C	Yes	No	Yes

Find out more at thermofisher.com/broad-range-pcr



Application notes for microbiome research

- Bacterial 16S rRNA gene detection
- DNA-free PCR enzyme manufacturing
- Human microbiome metagenomic analyses
- Stool bacterial detection

Download at thermofisher.com/molbioliterature

Enable fast purification of high-quality microbial and host DNA

Obtaining high-quality DNA for accurate genomic inference of microbiome composition can be challenging. Specifically developed for microbiome research, the Applied Biosystems™ MagMAX™ Microbiome Ultra Nucleic Acid Isolation Kit and the Invitrogen™ PureLink™ Microbiome DNA Purification Kit enable fast and easy isolation of high-quality nucleic acids.



Choose the microbiome purification kit that best suits your specific needs

	MagMAX Microbiome Ultra Nucleic Acid Isolation Kit	PureLink Microbiome DNA Purification Kit
Sample types	Stool, swabs, transport media, culture media, urine, saliva, and soil	
Throughput	Low and high	Low (<24 samples)
Downstream applications	PCR, real-time PCR, microarrays, next-generation sequencing	
Automation compatibility	Thermo Scientific™ KingFisher™ Duo Prime, Flex, and Presto instruments	Manual only
Elution volume	50–200 µL	
Time per run (96 stool samples)	<60 minutes	120 minutes
Nucleic acids	RNA and DNA	DNA only

Find out more at thermofisher.com/magmaxmicrobiome

Ordering information

Product	Quantity	Cat. No.
Platinum II <i>Taq</i> Hot-Start DNA Polymerase	500 reactions	14966-005
	2,500 reactions	14966-025
Platinum <i>Taq</i> DNA Polymerase, DNA-free	500 units	15966-005
	5 x 500 units	15966-025
Platinum SuperFi II DNA Polymerase	500 units	12361-050
	5 x 500 units	12361-250
MagMAX Microbiome Ultra Nucleic Acid Isolation Kit	100 preps (with bead plate)	A42357
	100 preps (with bead tubes)	A42358
PureLink Microbiome DNA Purification Kit	1 kit	A29790

Find out more at
thermofisher.com/microbiome-products

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