

Method	Applications	Recommended Products
PCR	Gene expression analysis, cloning, mutation analysis, genotyping including allele specific, sequencing, and microarray confirmation, disease diagnosis, DNA methylation analysis, drug discovery, gene therapy.	dNTP mix (GoldBio Cat # D-900) Taq DNA Polymerase (GoldBio Cat # T-514) Taq DNA Polymerase plus dNTP (GoldBio Cat # T-515) T4 DNA Ligase (GoldBio Cat # T-410 or T-411) InstantAmp Plant Direct PCR Kit (GoldBio Cat # I-301)
Reverse Transcription-PCR	Gene expression analysis, cloning, rapid amplification of cDNA ends (RACE), RNA sequencing (RNA-seq), microarray probe development, species identification.	dNTP mix (GoldBio Cat # D-900) Taq DNA Polymerase (GoldBio Cat # T-514) Taq DNA Polymerase plus dNTP (GoldBio Cat # T-515)
qPCR	Gene expression analysis, single nucleotide polymorphism (SNP) genotyping, allele analysis, copy number variation analysis, microRNA (miRNA) analysis, DNA methylation analysis.	dNTP mix (GoldBio Cat # D-900) EvaGreen® Dye in DMSO (GoldBio Cat # E-675) EvaGreen® Dye in DMSO (GoldBio Cat # E-670) Goof-Proof™ qPCR Master Mix (GoldBio Cat # G-700) Goof-Proof™ qPCR Master Mix with ROX (GoldBio Cat # G-705) Goof-Proof Universal Probe Master Mix (GoldBio Cat # G-710) Goof-Proof Universal Probe Master Mix with ROX (GoldBio Cat # G-715)
Reverse Transcription-qPCR	Gene expression analysis, pathogen detection and quantification, drug screening, disease diagnosis, microarray analysis.	dNTP mix (GoldBio Cat # D-900) EvaGreen® Dye in DMSO (GoldBio Cat # E-675) EvaGreen® Dye in DMSO (GoldBio Cat # E-670) Goof-Proof™ qPCR Master Mix (GoldBio Cat # G-700) Goof-Proof™ qPCR Master Mix with ROX (GoldBio Cat # G-705) Goof-Proof Universal Probe Master Mix (GoldBio Cat # G-710) Goof-Proof Universal Probe Master Mix with ROX (GoldBio Cat # G-715)
Hot Start PCR	Cloning, routine PCR, genotyping, low copy number template, high throughput PCR, complex template DNA (genomic DNA).	dNTP mix (GoldBio Cat # D-900) Hot Start Taq DNA Polymerase (GoldBio Cat # T-510) Hot Start Taq DNA Polymerase plus dNTP (GoldBio Cat # T-511) Hot Start Taq 2X Master Mix (GoldBio Cat # T-512)
Multiplex PCR	Mutation and gene deletion analysis, SNP genotyping, RNA detection, pathogen (viral, bacterial, etc.) identification.	dNTP mix (GoldBio Cat # D-900) Taq DNA Polymerase (GoldBio Cat # T-514) Taq DNA Polymerase plus dNTP (GoldBio Cat # T-515) Taq DNA Polymerase with Dye (GoldBio Cat # T-516) Taq DNA Polymerase with Dye plus dNTP (GoldBio Cat # T-517)