

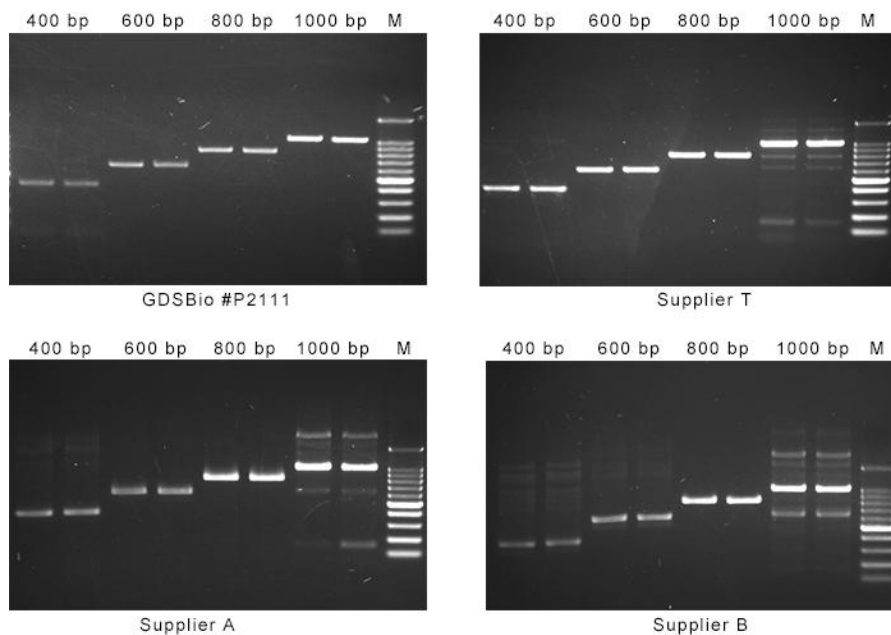
# Zero Background PCR Breakthrough with Enhanced Dual Antibody Modification Hotstart Technology

GDSBio has conducted a Hotstart upgrade of dual antibody modification for some of the most widely used PCR products in the field of molecular diagnostics, achieving zero background PCR and improving the accuracy of detection. This technology is GDSBio's patented technology - Enhanced Dual Antibody Modification Hotstart Technology, which uses two monoclonal antibodies to block the active site of DNA polymerase, inhibiting non-specific amplification or primer dimer formation at room

temperature and during the PCR reaction process, thereby achieving a background-free amplification.

### Technical advantages:

- ① **Enhanced dual antibody modification, with higher specificity than conventional dual antibody modification.**
- ② **Zero background products, no non-specific DNA bands, no primer dimers**
- ③ **No need for gel cutting, products can be directly recovered for cloning**



Using the upgraded GDSBio #P2111 Super HIFI PCR Master Mix modified with dual antibodies and similar products from manufacturers T, A, and B, we amplified fragments of 400 bp, 600 bp, 800 bp, and 1000 bp using human genomic DNA as a template. The results showed that #P2111 could achieve zero background amplification in four different reactions.

Figure 1: Electrophoresis results. M: GDSBio #M1061 100bp Ladder

### PCR reagents with enhanced dual antibody modification:

Application	Product Name	Cat. No.	Spec.
Ultra-high fidelity PCR	Super HIFI PCR Master Mix	P2111/P2112/P2113	1 ml/1 ml×10/10 ml×5
ARMS PCR	ARMS PCR Mix	P4011/P4012	1 ml/1 ml×5
KASP	KASP PCR Mix	P4021/P4022	1 ml/1 ml×5
High fidelity PCR	Hotstart Pfu Mix	P2051/P2052	1 ml/1 ml×5
Hotstart PCR	Optimus Hotstart Taq Mix	P2041/P2042	1 ml/1 ml×5
Multiplex PCR	Multiplex PCR Master Mix with UDG	PM2001/PM2002/PM2003	40rnxs/400rnxs/2000rnxs
NGS PCR enrichment	NGS Multiplex PCR Master Mix I	NM1001/NM1002/NM1003	40rnxs/400rnxs/2000rnxs
NGS PCR enrichment	NGS Multiplex PCR Master Mix II	NM2001/NM2002/NM2003	40rnxs/400rnxs/2000rnxs
NGS amplification library preparation	DSPath NGS Multiplex PCR Master Mix	K030-A/K030-B	80rnxs/400rnxs
NGS amplification library preparation	DSPath NGS Multiplex PCR Master Mix II	K031-A/K031-B	80rnxs/400rnxs