



# High-Specificity Pfu HS Mix

A high-fidelity, aptamer-based hot start DNA polymerase tailored for low GC bias amplification

## APPLICATION KEY

-  Human Diagnostics
-  Genetic Screening

A high-fidelity DNA polymerase with aptamer-based hot-start technology highly suited to target enrichment, NGS library amplification, and cloning applications. High-Specificity Pfu HS Mix provides high yield and sensitivity, as well as superior amplification of GC- and AT-rich targets. The hot-start aptamer binds reversibly to the polymerase which inhibits its activity at ambient temperatures and improves the specificity of the amplification.

## Pfu HS Polymerase

- Aptamer hot-start for increased specificity
- Inhibitor-tolerant (tolerates up to 20% whole blood)
- Robust amplification across different GC-content (29% - 65%)
- High-fidelity reduces errors for NGS library amplification
- Convenient room temperature reaction set-up
- Suitable for multiplexing

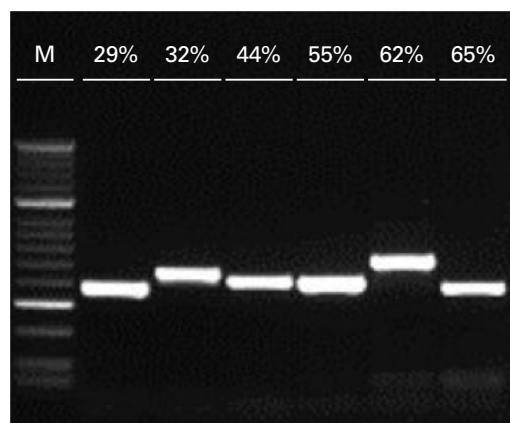
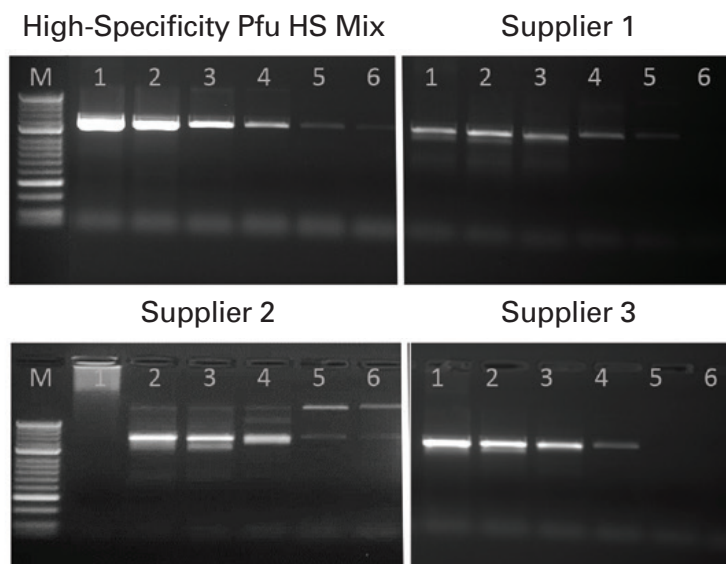
PRODUCT	CAT NO.	VOLUME	REACTIONS
High-Specificity Pfu HS Mix	MDX006	5 mL	200
		100 mL	4,000

## Product Highlights

### High sensitivity and yield

PCR amplification of a 1.2 kb fragment of the F8 gene, from a five-fold serial dilution of human genomic DNA. All reactions were set up according to the manufacturers' recommendations. Marker is HyperLadder™ 50 bp, (BIO-33054).

Meridian's High-Specificity Pfu HS Mix has higher sensitivity and yield over suppliers.



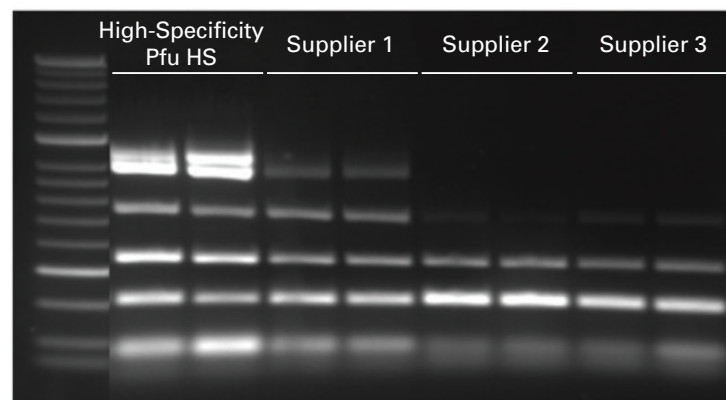
### Efficient amplification of DNA containing a wide range of GC-content

The following regions from human genomic DNA were amplified: RBB8 161 bp (29% GC), RBB8 450 bp (32% GC), IL 10 417 bp (44% GC), Mpex 418 bp (55% GC), EGFR 525 bp (62% GC), EGFR 380 bp (65% GC). Marker is HyperLadder™ 50 bp, (BIO-33054).

Efficient amplification was possible across the different GC content tested demonstrating the suitability of High-Specificity Pfu HS Mix for applications requiring low GC-bias.

### Suitable for multiplex reactions from inhibitor-rich samples

Multiplexed PCR amplification of 6 targets (961 bp, 892 bp, 793 bp, 548 bp, 332 bp, 196 bp) directly amplified from 20% whole blood and run in duplicate. Marker is HyperLadder™ 50 bp, (BIO-33054). High-specificity Pfu HS Mix is able to outperform other suppliers in the presence of 20% whole EDTA blood in a multiplexed PCR reaction.



### Ordering information:

**USA**  
5171 Wilfong Road  
Memphis, Tennessee 38134  
Fax: +1 901-333-8223  
Toll Free: +1 800 327 6299

Email: [info@meridianlifescience.com](mailto:info@meridianlifescience.com)  
Orders: [orders@meridianlifescience.com](mailto:orders@meridianlifescience.com)

Connect with us:



**meridian** BIOSCIENCE™  
LIFE DISCOVERED. LIFE DIAGNOSED.

[www.MeridianLifeScience.com](http://www.MeridianLifeScience.com)