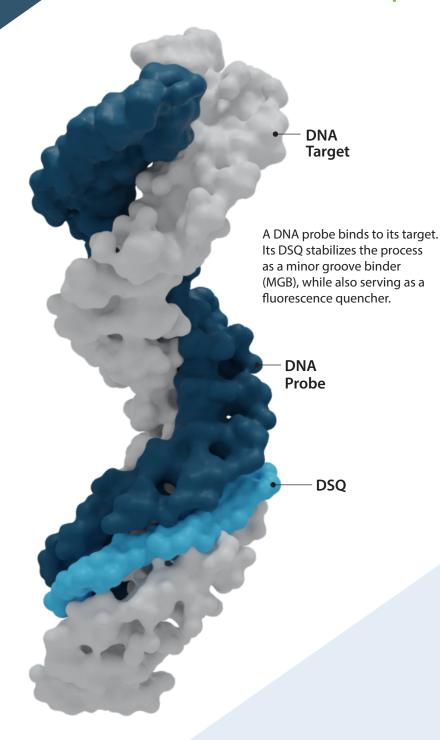


DSQ
An evolution of real-time
PCR chemistry, from the
inventors of MGB probes¹



Our DNA duplex stabilizing quencher² (DSQ) provides a simplified TaqMan³ probe structure

- DSQ is a universal quencher and MGB fused into one hybrid molecule.
- DSQ probes offer DNA duplex stabilization and specificity, with better quenching.



¹ Kutyavin, Lukhtanov, Gamper, Meyer, ELITechGroup MDx. US5801155A, Appl. 1995, Issued 1998.



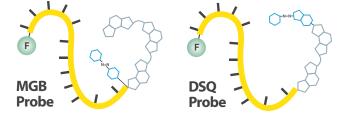
² Lukhtanov and Scarr, ELITechGroup MDx. US10677728B2, Appl. 2018,

³ TaqMan is a registered trademark of Roche Molecular Systems, Inc.

Our legacy of innovation continues with DSQ chemistry, merging the original MGB probe and fluorescence quencher first brought to you by ELITechGroup MDx in the 1990s.



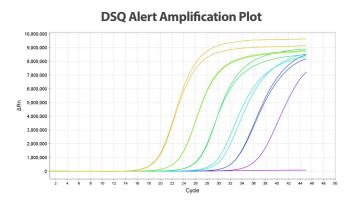
- ◆ MGB probe chemistry set an industry standard in real-time PCR.
- The simplified DSQ probe chemistry combines DNA duplex stabilization and fluorescence quenching in one structure.



- DSQ is a minor groove binder, offering the same benefits as an MGB:
 - Allows for shorter probes for high specificity and mismatch detection
 - Provides added stability to the probe-target DNA duplex
 - Maximum PCR efficiency is achieved with efficient DSQ probe hydrolysis



- Provides lower background fluorescence levels than other quenchers
- Efficiently quenches a wide range of fluorescent dyes, ideal for multiplexing



Signal to Background Ratio 16.0 14.0 12.0 10.0 8.0 6.0 4.0 2.0 0.0 KPC (FAM) IC (AP525)

MGB probe chemistry is the architectural principle behind our portfolio of MGB Alert $^{\circ}$ products. DSQ chemistry is the foundation of our new DSQ Alert $^{\infty}$ products.

With DSQ Alert reagents, ELITechGroup MDx continues to drive innovation in its product portfolio. Both MGB Alert and DSQ Alert reagents are compatible with the ELITe InGenius® and ELITe BeGenius® instrument systems, and on most open channel platforms.



Scan to learn more.