

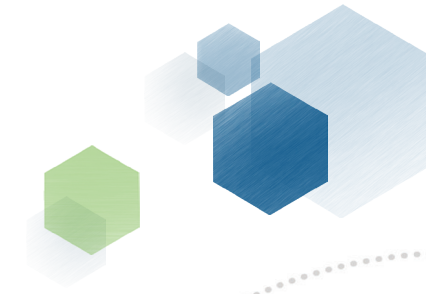
## About ELITechGroup MDx

A pioneer in PCR technologies for more than 20 years, ELITechGroup is a leading PCR innovator with the revolutionary Minor Groove Binder (MGB) technology. Our culture of innovation, combined with long-lasting collaborations with customers and prestigious clinical partners enables us to design and manufacture superior real-time PCR reagents for a wide range of infectious disease applications. Leveraging our extensive experience in the molecular testing field and a deep knowledge of laboratory needs and challenges, we recently developed ELITe InGenius® a highly flexible sample-to-result solution to simplify laboratory workflow, reduce time-to-result and improve patient management.

## High value molecular testing solutions for laboratories

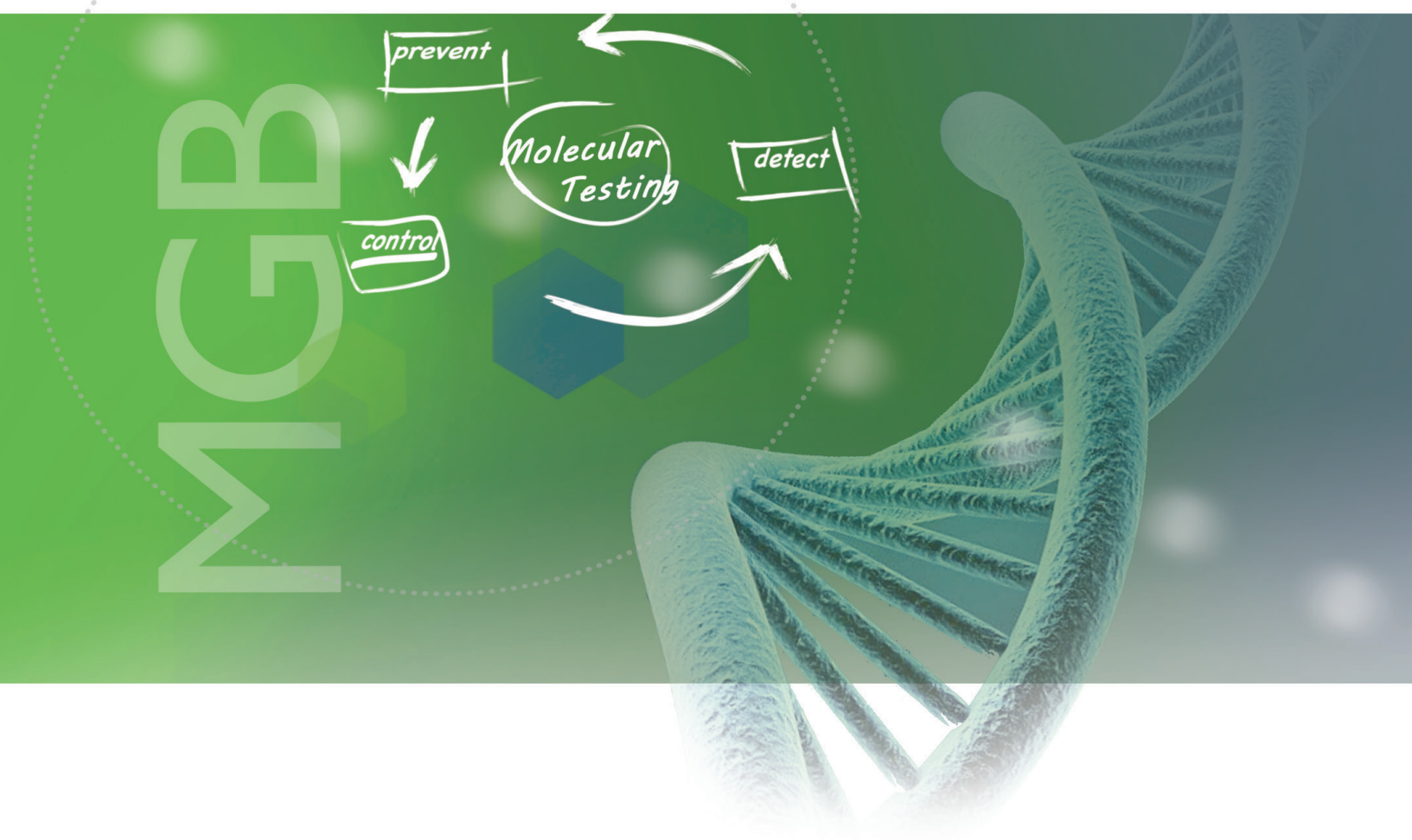


## MOLECULAR DIAGNOSTICS



Analyte Specific Reagents for Real-Time PCR

# MGB Alert® ASRs



**BROAD RANGE** dedicated to infectious disease testing

**HIGHEST PERFORMANCE** for accurate results

**LEADING-EDGE** PCR solutions based on MGB technology

<sup>1</sup> Minor Groove Binder-Conjugated DNA Probes for Quantitative DNA Detection by Hybridization-Triggered Fluorescence, Afonina,I., Reed,M., Lusby,E., Shishkina,I., and Belousov,Y., PRODUCT APPLICATION FOCUS, BioTechniques 32:940-949, 2002

<sup>2</sup> 3'-Minor groove binder-DNA probes increase sequence specificity at PCR extension temperatures, Kutuyavin,I., Afonina,I., Mills,A., Gorn,V., Lukhtanov,E., Belousov,E., Singer,M., Walburger,D., Lokhov,S., Gall,A., Dempcy,R., Reed,M., Meyer,R., and Hedgpeth,J., Nucleic Acids Research, 2000, Vol. 28, No. 2

<sup>3</sup> Novel DNA probes with low background and high hybridization-triggered fluorescence, Lukhtanov,E., Lokhov,S., Gorn,V., Podyminogin,A., and Mahoney,W., Nucleic Acids Research, 2007, Vol. 35, No. 5 e30

The analytical and clinical performance of Analyte Specific Reagent (ASR) products are not established.

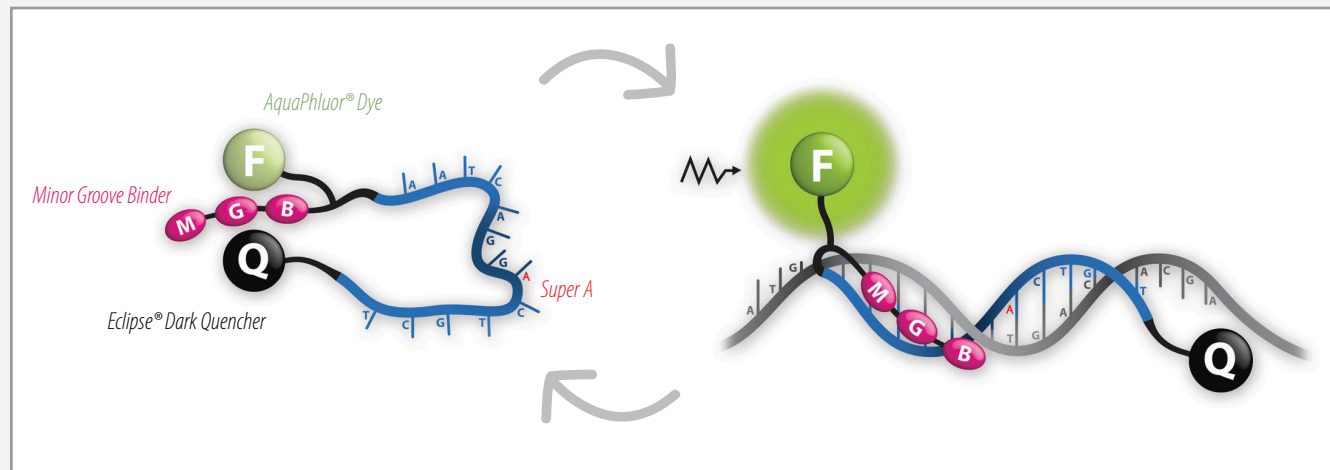
# ELITechGroup Real-Time PCR Proprietary Technologies

Over the years, we have developed a comprehensive suite of PCR technologies, including the revolutionary Minor Groove Binder (MGB) which is recognized as an industry standard today. Our expertise enables us to design and manufacture superior sensitivity and specificity research use reagents, Analyte Specific Reagents and IVD real-time PCR assays, providing unsurpassable performance for laboratories and clinicians.

## PLEIADES PROBES

Proprietary probes concentrating all ELITechGroup PCR technologies, designed with **Minor Groove Binder (MGB)**, **Eclipse® Dark Quencher**, **AquaPhluor® dyes**, and **Superbases™**

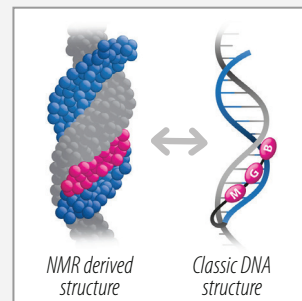
- Very low background and high hybridization-triggered fluorescence
- Unique quenching effects with the combined action of MGB and Eclipse® Dark Quencher
- Exceptional specificity from shorter length probes with the MGB moiety
- Improved sensitivity by combining the strong hybridization signal with low background
- Melt-curve analysis capability



### MGB (MINOR GROOVE BINDER)

Synthetic molecule attached to the 5'-end of MGB DNA probes, that binds in the minor groove of hybrid DNA molecules<sup>1,2,3</sup>

- Increase stability of hybrid DNA enabling the design of shorter probes for excellent specificity and sensitivity polymorphisms discrimination
- Identify emerging mutations and reliably discriminate clinically important variants
- Increase Tm reproducibly in A-T and G-C rich regions
- Enable reliable, clear and unambiguous melt-curve analysis



### ECLIPSE® DARK QUENCHER

Absorbs the fluorophore energy and dissipates it as heat; while a typical quencher re-emits part of the energy as light

- Improve absorbance of fluorescence emitted from dye reagents
- Decrease background level of fluorescence
- Improve PCR assay sensitivity
- Cover 4 spectra wavelengths

### AQUAPHLUOR® DYE

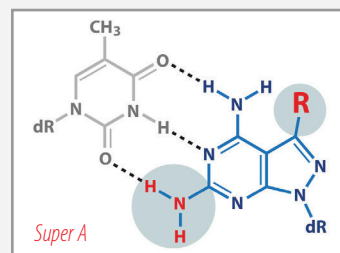
Fluorescent compound that can re-emit light upon light excitation

- Optimize detection with the comprehensive range of 25 different colors from UV to far-red developed
- Utilize dyes perfectly adapted to multiplexed assays

### SUPERBASES™: Super A, Super T, Super G, and Super I

Engineered nucleotides selectively used to optimize primers and probes design

- Enhance A-T stability (e.g. rich A/T domains)
- Reduce secondary structure (e.g. GG self-association) and fluorescence quenching
- Confer close Tm value when paired with any bases



# Analyte Specific Reagents



Part Number	Product Description	Reactions
<b>ADENOVIRUS</b>		
800497	MGB Alert Adenovirus Primer Mix ASR	48
800498	MGB Alert Adenovirus Probe Mix ASR	48
<b>BK VIRUS</b>		
800411	MGB Alert BK Virus Primer Mix ASR	48
800421	MGB Alert BK Virus Probe Mix ASR	48
800332	MGB Alert BK Virus Primer Mix ASR	480
800333	MGB Alert BK Virus Probe Mix ASR	480
<b>CYTOMEGALOVIRUS</b>		
800413	MGB Alert CMV 3.0 Primer Mix ASR	48
800423	MGB Alert CMV 3.0 Probe Mix ASR	48
800350	MGB Alert CMV 3.0 Primer Mix ASR	480
800404	MGB Alert CMV 3.0 Probe Mix ASR	480
<b>EPSTEIN-BARR VIRUS</b>		
800414	MGB Alert EBV Primer Mix ASR	48
800424	MGB Alert EBV Probe Mix ASR	48
800334	MGB Alert EBV Primer Mix ASR	480
800335	MGB Alert EBV Probe Mix ASR	480

Part Number	Product Description	Reactions
<b>HUMAN HERPES VIRUS - 6</b>		
800499	MGB Alert HHV6 2.0 Primer Mix ASR	48
800500	MGB Alert HHV6 2.0 Probe Mix ASR	48
<b>HUMAN HERPES VIRUS - 8</b>		
M800597	MGB Alert HHV8 Primer Mix ASR	48
M800598	MGB Alert HHV8 Probe Mix ASR	48
<b>HERPES SIMPLEX VIRUS 1&amp;2</b>		
800518	MGB Alert HSV Typer AS Primer Mix ASR	48
800426	MGB Alert HSV 1&2 Probe Mix ASR	48
<b>JC VIRUS</b>		
M800601	MGB Alert JCV Primer Mix ASR	48
M800602	MGB Alert JCV Probe Mix ASR	48
<b>PARVOVIRUS B19</b>		
M800682	MGB Alert Parvovirus Primer Mix ASR	48
M800683	MGB Alert Parvovirus Probe Mix ASR	48
<b>VARICELLA ZOSTER VIRUS</b>		
800418	MGB Alert VZV Primer Mix ASR	48
800419	MGB Alert VZV Probe Mix ASR	48



Part Number	Product Description	Reactions
<b>BORDETELLA PERTUSSIS / PARAPERTUSSIS</b>		
800437	MGB Alert Bordetella P/PP Primer Mix ASR	48
800438	MGB Alert Bordetella P/PP Probe Mix ASR	48
<b>CHLAMYDOPHILA PNEUMONIAE</b>		
800433	MGB Alert Chlamydomphila pneumoniae Primer Mix ASR	48
800434	MGB Alert Chlamydomphila pneumoniae Probe Mix ASR	48
<b>HUMAN METAPNEUMOVIRUS</b>		
800306	MGB Alert hMPV Primer Mix ASR	48
800307	MGB Alert hMPV Probe Mix ASR	48

Part Number	Product Description	Reactions
<b>LEGIONELLA</b>		
M800684	MGB Alert Legionella pneumophila Primer Mix ASR	48
M800685	MGB Alert Legionella pneumophila Probe Mix ASR	48
M800686	MGB Alert Pan Legionella Primer Mix ASR	48
M800687	MGB Alert Pan Legionella Probe Mix ASR	48
<b>PNEUMOCYSTIS JIROVECI</b>		
M800573	MGB Alert Pneumocystis jirovecii Primer Mix ASR	48
M800572	MGB Alert Pneumocystis jirovecii Probe Mix ASR	48



Part Number	Product Description	Reactions
<b>TRICHOMONAS VAGINALIS</b>		
M800583	MGB Alert Trichomonas vaginalis Primer Mix ASR	48
M800582	MGB Alert Trichomonas vaginalis Probe Mix ASR	48



Part Number	Product Description	Reactions
<b>ENTEROVIRUS</b>		
800336	MGB Alert Enterovirus Primer Mix ASR	48
800337	MGB Alert Enterovirus Probe Mix ASR	48

## Master Mixes

Part Number	Product Description	Reactions
<b>MGB Alert PCR Master Mix</b>		
M800331	MGB Alert PCR Master Mix	48
M800547	MGB Alert PCR Master Mix	480
<b>MGB Alert Platinum Taq Master Mix</b>		
M800693	MGB Alert Platinum Taq Master Mix	48
M800694	MGB Alert Platinum Taq Master Mix	480
<b>MGB Alert Reverse One-Step Reverse Transcriptase PCR Master Mix</b>		
M800689	MGB Alert One-Step RT PCR Master Mix	48

Ancillary PCR reagents are available. Additional catalogs about GPR enzymes & polymerases, Research Use Only PCR reagents, and reagents for Oligonucleotide Labeling (Fluorescent Dyes, Quenchers, Modified Nucleic Acid Bases and Minor Groove Binders) are separately available. Please inquire for more details.