

Individual Report

QCMD 2016 Borrelia burgdorferi spp. DNA EQA Programme



Catalogue Code: QAB114147	Ref Code: BbDNA16	Challenge: 1 of 1	Analysis Type: Qualitative	Dataset: 112722	Report UID: 2677/112722/663	Participant: CZ023-01
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Intended Results / Panel Composition

Sample Code	Sample Content	Matrix	Sample Relationships [1]	Detection Frequency [2]	Sample Status [3]	Percentage Correct (All) [4]	
						(%)	(n)
BbDNA16-01	Borrelia bavariensis	BHI Broth	DS3_1	Frequently Detected	CORE	100.0	61
BbDNA16-02	Borrelia garinii	BHI Broth	DS1_1	Frequently Detected	CORE	100.0	61
BbDNA16-03	Borrelia burgdorferi s.s.	BHI Broth	DS2_2	Frequently Detected	CORE	95.1	61
BbDNA16-04	Borrelia burgdorferi s.s.	BHI Broth	DS2_1	Frequently Detected	CORE	100.0	61
BbDNA16-05	Borrelia garinii	BHI Broth	DS1_2	Frequently Detected	CORE	98.4	61
BbDNA16-06	Borrelia Negative	BHI Broth		Negative	CORE	98.4	61
BbDNA16-07	Treponema phagedenis	BHI Broth		Negative	CORE	96.7	61
BbDNA16-08	Borrelia bavariensis	BHI Broth	DS3_3	Frequently Detected	CORE	100.0	61
BbDNA16-09	Borrelia afzelii	BHI Broth		Frequently Detected	CORE	100.0	61
BbDNA16-10	Borrelia bavariensis	BHI Broth	DS3_2	Frequently Detected	CORE	100.0	61


[1] **Sample Relationships:** Indicates the relationships of the samples within this challenge. Dilution series are indicated by 'DS1' with each panel member in the dilution series represented by a number in order of titre, where DS1_1 represents the highest titre within that dilution series. Further dilution series are indicated by 'DS2' 'DS3' etc. If one duplicate pair is present this is indicated by 'D1'. Further duplicate pairs are indicated by 'D2', 'D3' etc.

[2] **Detection Frequency:** To aid qualitative analysis each panel member is assigned a frequency of detection. This is based on the peer group consensus of all qualitative results returned from participants within the EQA challenge / distribution.

[3] **Sample Status:** EQA samples are defined as "CORE" or "EDUCATIONAL". Core proficiency samples are reviewed by the QCMD Scientific Expert(s). This is on the basis of scientific information, clinical relevance, current literature and, where appropriate, professional clinical guidelines. Participating laboratories are expected to report core proficiency samples correctly within the EQA challenge / distribution.

[4] **Percentage Correct (All):** Percentage of datasets (%) reporting the correct qualitative result and the total number of datasets (n) reported for each panel member.

For further details please refer to the current participant manual.

Individual Report	QCMD 2016 Borrelia burgdorferi spp. DNA EQA Programme				 <small>Quality Control for Molecular Diagnostics</small>	
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Your Summary Results

EQA Assessment Group ^[1]	Commercial
Core Panel Detection (Qualitative) Score ^[2]	0

Sample Code	Qualitative Results			Your Quantitative Data (for information only) ^[3]		
	Percentage Correct (All) ^[4]	Your Result ^[5]	Detection Score ^[6]	Reported Value	Unitage	Cycle Threshold
BbDNA16-01	100.0	Positive	0		N/A	-
BbDNA16-02	100.0	Positive	0		N/A	-
BbDNA16-03	95.1	Positive	0		N/A	-
BbDNA16-04	100.0	Positive	0		N/A	-
BbDNA16-05	98.4	Positive	0		N/A	-
BbDNA16-06	98.4	Negative	0		N/A	-
BbDNA16-07	96.7	Negative	0		N/A	-
BbDNA16-08	100.0	Positive	0		N/A	-
BbDNA16-09	100.0	Positive	0		N/A	-
BbDNA16-10	100.0	Positive	0		N/A	-

[1] **EQA Assessment Group:** To aid data analysis, participant results are grouped according to the molecular amplification/detection method specified within their molecular workflow for this challenge / distribution. For further details refer to the *Additional Information: Individual Panel Member Analysis* section of this report.

[2] **Core Panel Detection (Qualitative) Score:** An overall core panel detection score provided per challenge / distribution.


[3] **Quantitative Data (for information only):** This is the quantitative value, unitage and cycle threshold you provided when you submitted your results. For qualitative programmes this information is not used as part of your formal EQA assessment.

[4] **Percentage Correct (All)** Percentage of datasets (%) reporting the correct qualitative results for each panel member.

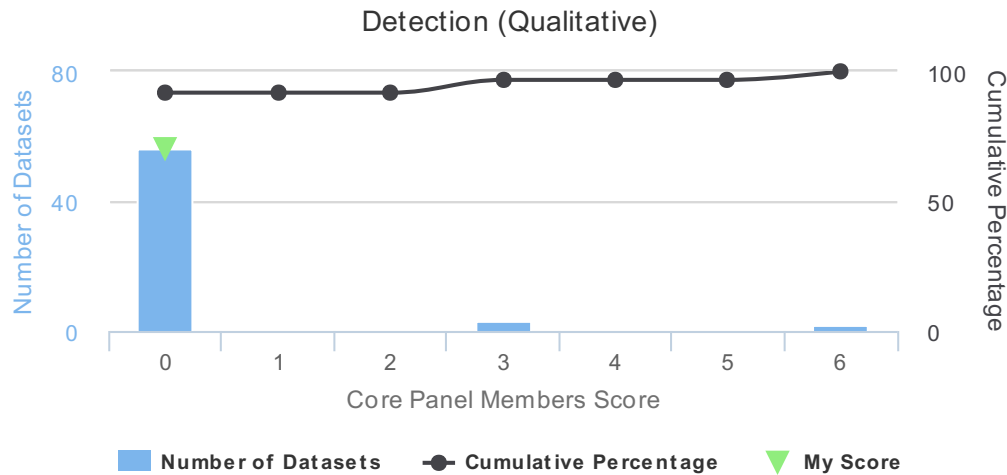
[5] **Your Result:** The qualitative result you reported for each sample within this EQA challenge / distribution.

[6] **Detection Score:** Your detection (qualitative) scores are based on the assigned detection frequency of each panel members, where 0 (zero) is "highly satisfactory" and 3 (three) is "highly unsatisfactory". Scores are provided for individual panel members.

For further details please refer to the current participant manual.

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Core Panel Member Score Breakdown




Core Panel Member Score Breakdown - Detection: This figure gives you a breakdown of the qualitative detection scores for all qualitative datasets returned within this EQA challenge / distribution independent of the EQA assessment group. Panel detection scores are generated from only those panel members that are defined as “CORE”.
For further details please refer to the current participant manual.

My Workflow Details

The details of the workflow used to submit your results for this challenge.

Name	Borrelia burgdorferi PCR Kit (v2)
Description	
Targets	B Borrelia burgdorferi
Assays	<ul style="list-style-type: none"> 🧬 <i>Extraction</i> - Manual Extraction Process <ul style="list-style-type: none"> ● Commercial <ul style="list-style-type: none"> ○ Kit Manufacturer: <i>GeneProof</i> ○ Kit Type: <i>PathogenFree DNA Isolation Kit</i> 📡 <i>Amplification</i> - Shanghai Hongshi Medical Technology - SLAN <ul style="list-style-type: none"> ● Commercial <ul style="list-style-type: none"> ○ Kit Manufacturer: <i>GeneProof</i> ○ Kit Type: <i>Borrelia burgdorferi PCR kit</i> ○ Kit Version: <i>ISEX</i>

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Further Programme Details

Number of Participants	59
Number of Countries	16
Number of Respondents	57
Number of Datasets Submitted	61
Qualitative Results Returned	61 (100.0%)

EQA Programme Aims

To assess the qualitative detection of *Borrelia burgdorferi* sensu stricto (*B. burgdorferi* s.s) at different concentrations. To assess the qualitative detection of *B. burgdorferi* genospecies complex at different concentrations.

Feedback and Enquiries

Participants are encouraged to read the QCMD Participants' Manual, which can be downloaded from the QCMD website.


Any queries about this report should be addressed to the QCMD Neutral Office (neutraloffice@qcmd.org).

Additional Information: Individual Panel Member Analysis (Qualitative)

Qualitative analysis for each panel member is provided in relation to your EQA assessment group. EQA assessment groups are established using the molecular workflow information reported by all participants within this EQA challenge / distribution. The principal level of assessment is at the individual method level which is defined based on your reported "amplification/detection method" and other laboratories using the same or similar amplification/detection methods.

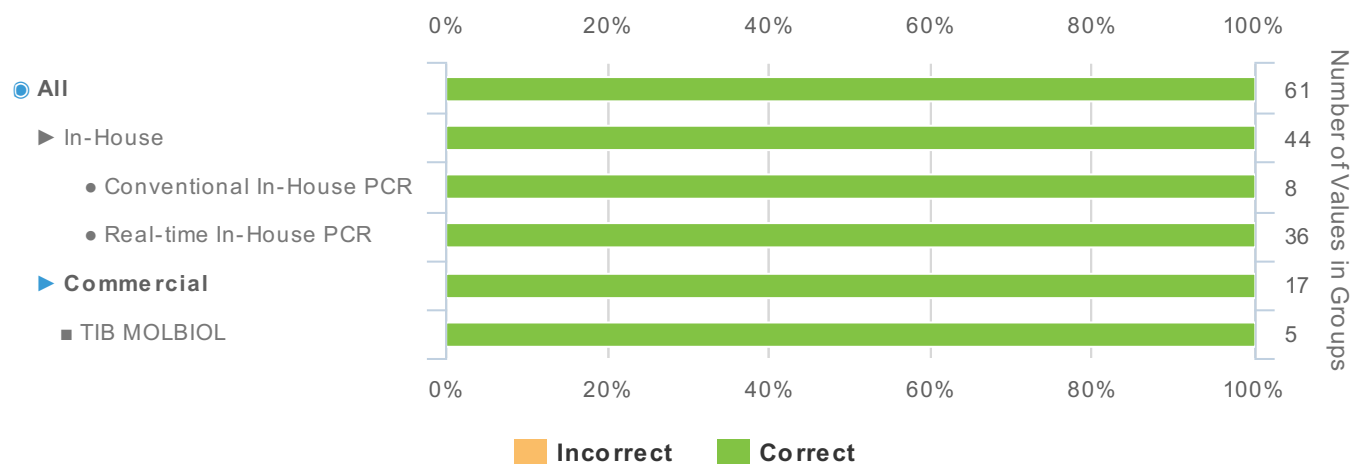
To allow meaningful assessment at the individual method level the EQA assessment group must consist of 5 or more datasets. If there are not sufficient datasets at the individual method level then your results will be included within a higher EQA assessment group based on whether it is a commercial or in house technology/method. The highest level assessment grouping is "All" participant reported qualitative results.

A breakdown of qualitative results reported by participants on each of the panel members within this EQA challenge / distribution is provided below. You can compare your results to those within your EQA assessment group and those obtained within other EQA assessment groups or to the overall consensus for each sample within this EQA challenge / distribution.

Individual Report		QCMD 2016 Borrelia burgdorferi spp. DNA EQA Programme			 Quality Control for Molecular Diagnostics	
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BbDNA16-01 - Qualitative Results Breakdown

Sample Code	Sample Content	Matrix	Sample Relationships	Detection Frequency	Sample Status	Percentage Correct All	
						(%)	(n)
BbDNA16-01	Borrelia bavariensis	BHI Broth	DS3_1	Frequently Detected	CORE	100.0	61



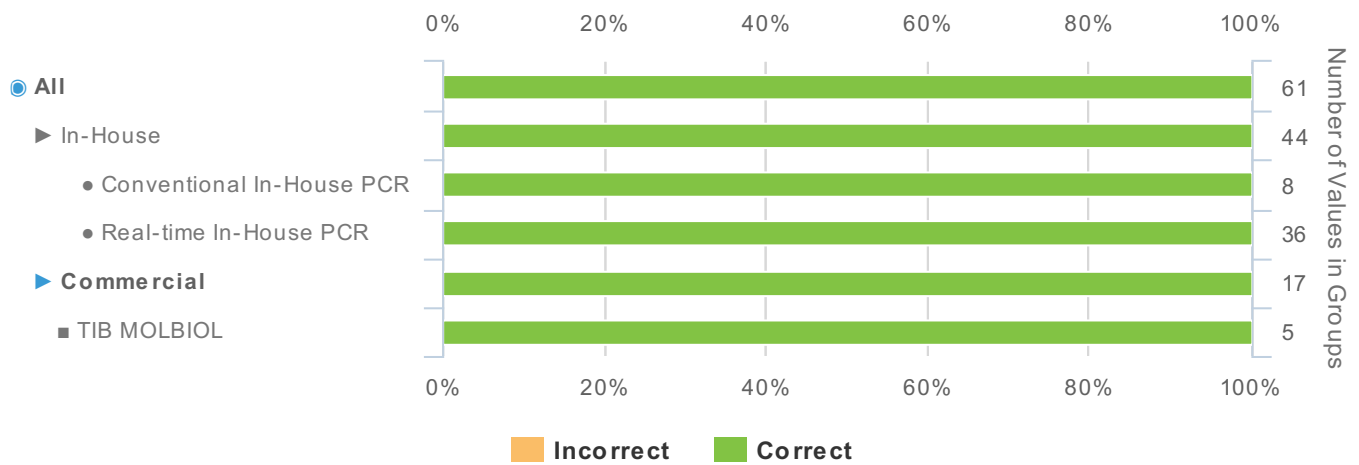
Groups below n=5: InterLabService (n=1), InterLabService - InterLabService AmpliSens (n=1), Hain Lifescience (n=1), Hain Lifescience - Hain Lifescience FlouroType (n=1), ELITech Group (n=1), ELITech Group - Elitech Alert Oligomix kit (n=1), Roche (n=2), Roche - Roche LightCycler (n=2), gerbion (n=1), gerbion - gerbion Real Time PCR (n=1), PathoFinder (n=1), PathoFinder - PathoFinder Real Time PCR (n=1), GeneProof (n=3), GeneProof - GeneProof Real Time PCR kit (n=3), QIAGEN (n=2), QIAGEN - Qiagen PCR reagents (n=1), QIAGEN - Qiagen Artus Real Time (n=1)

Groups Rolled Up: TIB MOLBIOL - TIB-MolBioI LightMix (n=5)

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BbDNA16-02 - Qualitative Results Breakdown

Sample Code	Sample Content	Matrix	Sample Relationships	Detection Frequency	Sample Status	Percentage Correct All	
						(%)	(n)
BbDNA16-02	Borrelia garinii	BHI Broth	DS1_1	Frequently Detected	CORE	100.0	61



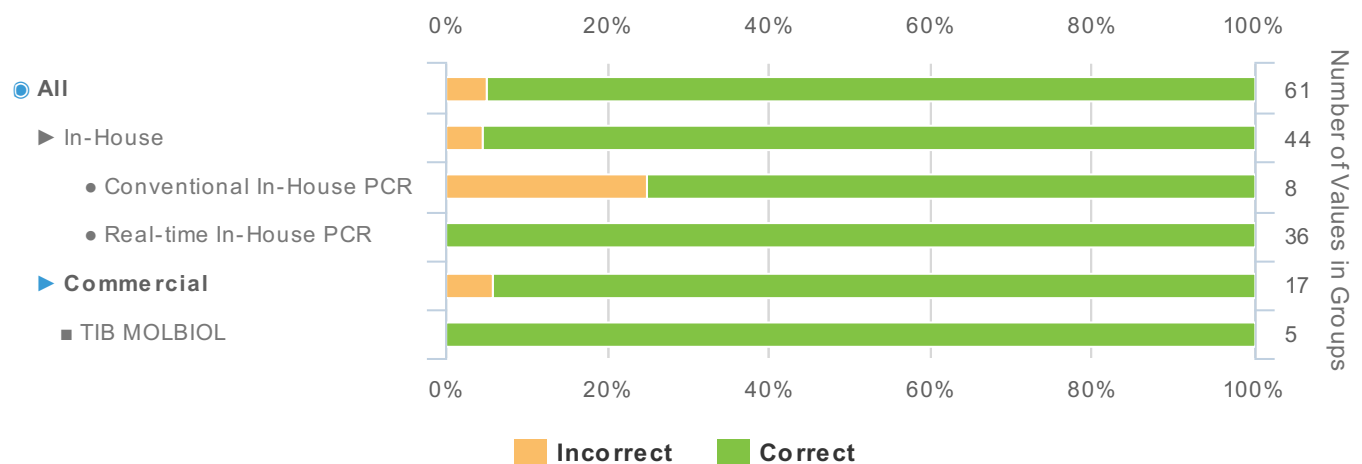
Groups below n=5: InterLabService (n=1), InterLabService - InterLabService AmpliSens (n=1), Hain Lifescience (n=1), Hain Lifescience - Hain Lifescience FlouroType (n=1), ELITech Group (n=1), ELITech Group - Elitech Alert Oligomix kit (n=1), Roche (n=2), Roche - Roche LightCycler (n=2), gerbion (n=1), gerbion - gerbion Real Time PCR (n=1), PathoFinder (n=1), PathoFinder - PathoFinder Real Time PCR (n=1), GeneProof (n=3), GeneProof - GeneProof Real Time PCR kit (n=3), QIAGEN (n=2), QIAGEN - Qiagen PCR reagents (n=1), QIAGEN - Qiagen Artus Real Time (n=1)

Groups Rolled Up: TIB MOLBIOL - TIB-MolBioI LightMix (n=5)

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BbDNA16-03 - Qualitative Results Breakdown

Sample Code	Sample Content	Matrix	Sample Relationships	Detection Frequency	Sample Status	Percentage Correct All	
						(%)	(n)
BbDNA16-03	Borrelia burgdorferi s.s.	BHI Broth	DS2_2	Frequently Detected	CORE	95.1	61



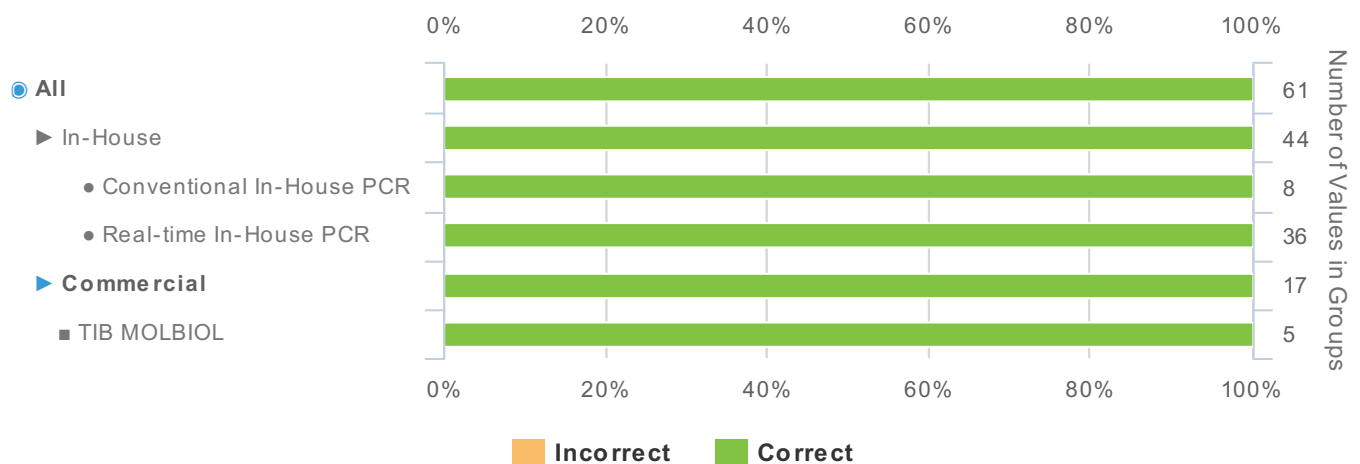
Groups below n=5: InterLabService (n=1), InterLabService - InterLabService AmpliSens (n=1), Hain Lifescience (n=1), Hain Lifescience - Hain Lifescience FlouroType (n=1), ELITech Group (n=1), ELITech Group - Elitech Alert Oligomix kit (n=1), Roche (n=2), Roche - Roche LightCycler (n=2), gerbion (n=1), gerbion - gerbion Real Time PCR (n=1), PathoFinder (n=1), PathoFinder - PathoFinder Real Time PCR (n=1), GeneProof (n=3), GeneProof - GeneProof Real Time PCR kit (n=3), QIAGEN (n=2), QIAGEN - Qiagen PCR reagents (n=1), QIAGEN - Qiagen Artus Real Time (n=1)

Groups Rolled Up: TIB MOLBIOL - TIB-MolBioI LightMix (n=5)

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BbDNA16-04 - Qualitative Results Breakdown

Sample Code	Sample Content	Matrix	Sample Relationships	Detection Frequency	Sample Status	Percentage Correct All	
						(%)	(n)
BbDNA16-04	Borrelia burgdorferi s.s.	BHI Broth	DS2_1	Frequently Detected	CORE	100.0	61



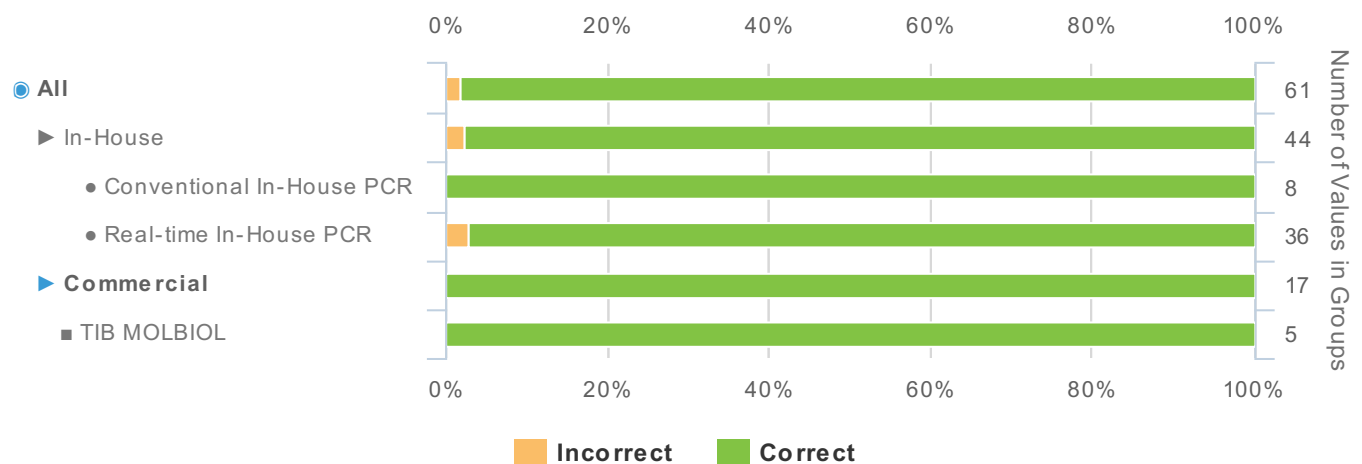
Groups below n=5: InterLabService (n=1), InterLabService - InterLabService AmpliSens (n=1), Hain Lifescience (n=1), Hain Lifescience - Hain Lifescience FlouroType (n=1), ELITech Group (n=1), ELITech Group - Elitech Alert Oligomix kit (n=1), Roche (n=2), Roche - Roche LightCycler (n=2), gerbion (n=1), gerbion - gerbion Real Time PCR (n=1), PathoFinder (n=1), PathoFinder - PathoFinder Real Time PCR (n=1), GeneProof (n=3), GeneProof - GeneProof Real Time PCR kit (n=3), QIAGEN (n=2), QIAGEN - Qiagen PCR reagents (n=1), QIAGEN - Qiagen Artus Real Time (n=1)

Groups Rolled Up: TIB MOLBIOL - TIB-MolBioI LightMix (n=5)

Individual Report		QCMD 2016 Borrelia burgdorferi spp. DNA EQA Programme			 Quality Control for Molecular Diagnostics	
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BbDNA16-05 - Qualitative Results Breakdown

Sample Code	Sample Content	Matrix	Sample Relationships	Detection Frequency	Sample Status	Percentage Correct All	
						(%)	(n)
BbDNA16-05	Borrelia garinii	BHI Broth	DS1_2	Frequently Detected	CORE	98.4	61



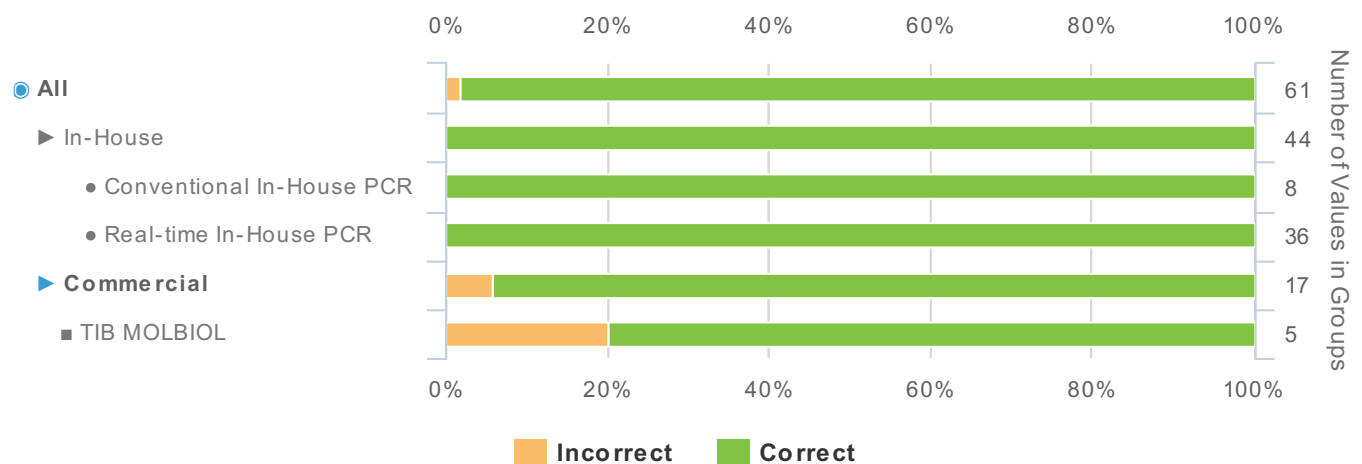
Groups below n=5: InterLabService (n=1), InterLabService - InterLabService AmpliSens (n=1), Hain Lifescience (n=1), Hain Lifescience - Hain Lifescience FlouroType (n=1), ELITech Group (n=1), ELITech Group - Elitech Alert Oligomix kit (n=1), Roche (n=2), Roche - Roche LightCycler (n=2), gerbion (n=1), gerbion - gerbion Real Time PCR (n=1), PathoFinder (n=1), PathoFinder - PathoFinder Real Time PCR (n=1), GeneProof (n=3), GeneProof - GeneProof Real Time PCR kit (n=3), QIAGEN (n=2), QIAGEN - Qiagen PCR reagents (n=1), QIAGEN - Qiagen Artus Real Time (n=1)

Groups Rolled Up: TIB MOLBIOL - TIB-MolBioI LightMix (n=5)

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BbDNA16-06 - Qualitative Results Breakdown

Sample Code	Sample Content	Matrix	Sample Relationships	Detection Frequency	Sample Status	Percentage Correct All	
						(%)	(n)
BbDNA16-06	Borrelia Negative	BHI Broth		Negative	CORE	98.4	61



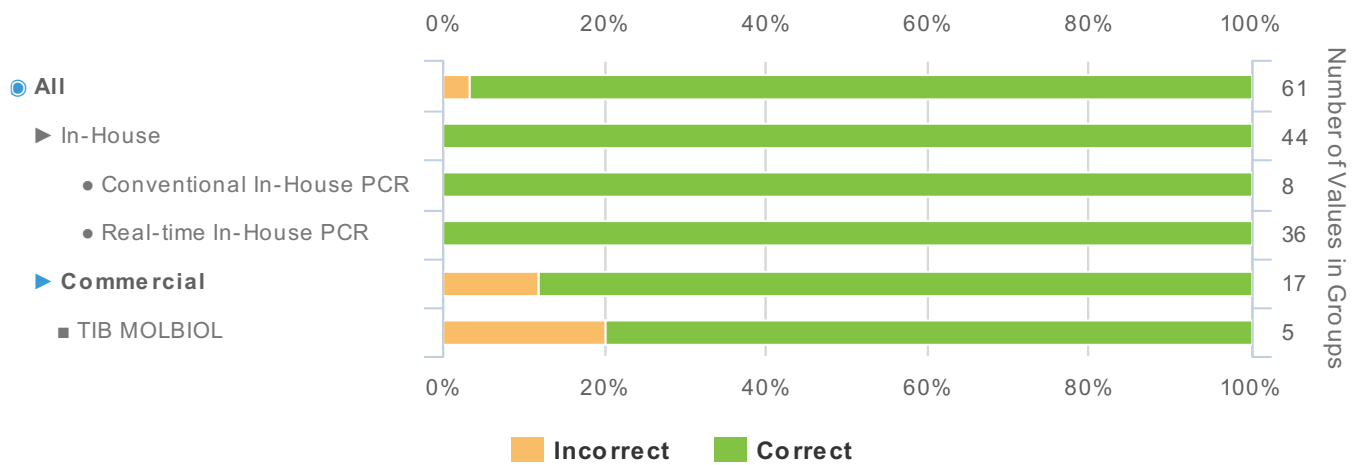
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Groups Rolled Up: TIB MOLBIOL - TIB-MolBioI LightMix (n=5)

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BbDNA16-07 - Qualitative Results Breakdown

Sample Code	Sample Content	Matrix	Sample Relationships	Detection Frequency	Sample Status	Percentage Correct All	
						(%)	(n)
BbDNA16-07	Treponema phagedenis	BHI Broth		Negative	CORE	96.7	61



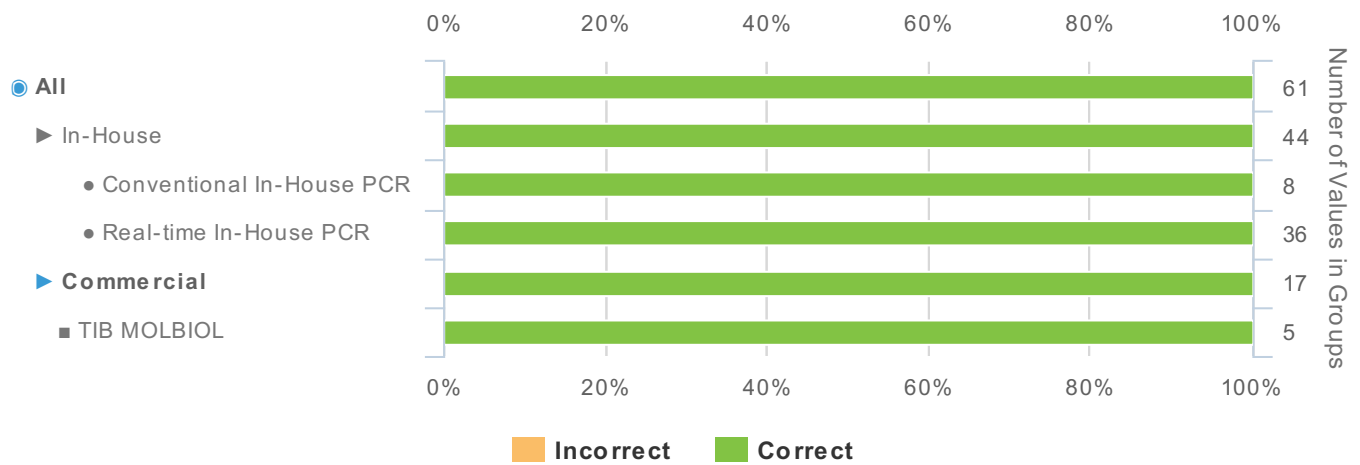
Groups below n=5: InterLabService (n=1), InterLabService - InterLabService AmpliSens (n=1), Hain Lifescience (n=1), Hain Lifescience - Hain Lifescience FlouroType (n=1), ELITech Group (n=1), ELITech Group - Elitech Alert Oligomix kit (n=1), Roche (n=2), Roche - Roche LightCycler (n=2), gerbion (n=1), gerbion - gerbion Real Time PCR (n=1), PathoFinder (n=1), PathoFinder - PathoFinder Real Time PCR (n=1), GeneProof (n=3), GeneProof - GeneProof Real Time PCR kit (n=3), QIAGEN (n=2), QIAGEN - Qiagen PCR reagents (n=1), QIAGEN - Qiagen Artus Real Time (n=1)

Groups Rolled Up: TIB MOLBIOL - TIB-MolBioI LightMix (n=5)

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BbDNA16-08 - Qualitative Results Breakdown

Sample Code	Sample Content	Matrix	Sample Relationships	Detection Frequency	Sample Status	Percentage Correct All	
						(%)	(n)
BbDNA16-08	Borrelia bavariensis	BHI Broth	DS3_3	Frequently Detected	CORE	100.0	61



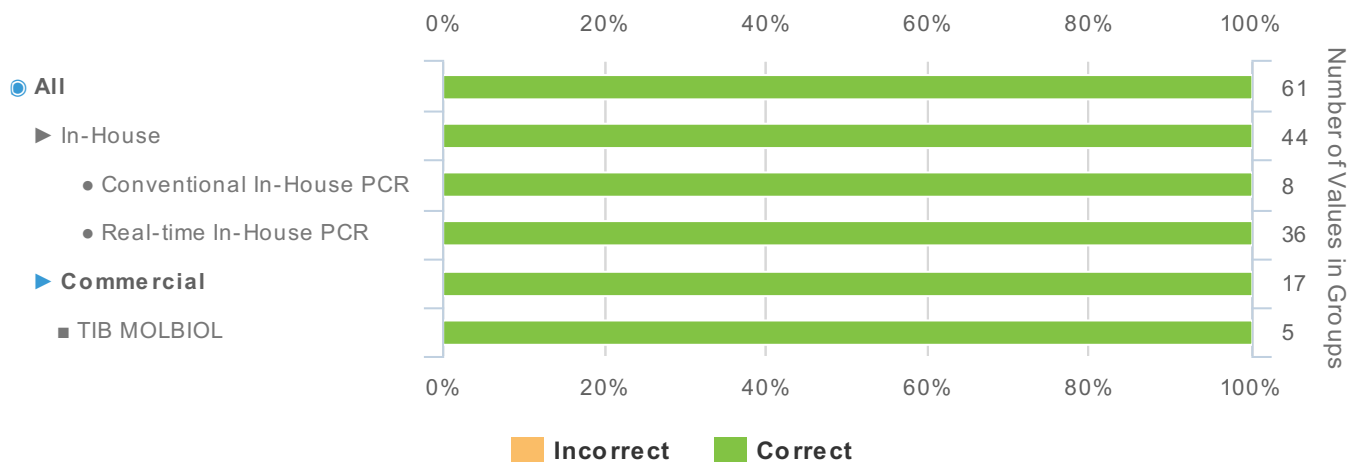
Groups below n=5: InterLabService (n=1), InterLabService - InterLabService AmpliSens (n=1), Hain Lifescience (n=1), Hain Lifescience - Hain Lifescience FlouroType (n=1), ELITech Group (n=1), ELITech Group - Elitech Alert Oligomix kit (n=1), Roche (n=2), Roche - Roche LightCycler (n=2), gerbion (n=1), gerbion - gerbion Real Time PCR (n=1), PathoFinder (n=1), PathoFinder - PathoFinder Real Time PCR (n=1), GeneProof (n=3), GeneProof - GeneProof Real Time PCR kit (n=3), QIAGEN (n=2), QIAGEN - Qiagen PCR reagents (n=1), QIAGEN - Qiagen Artus Real Time (n=1)

Groups Rolled Up: TIB MOLBIOL - TIB-MolBioI LightMix (n=5)

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BbDNA16-09 - Qualitative Results Breakdown

Sample Code	Sample Content	Matrix	Sample Relationships	Detection Frequency	Sample Status	Percentage Correct All	
						(%)	(n)
BbDNA16-09	Borrelia afzelii	BHI Broth		Frequently Detected	CORE	100.0	61



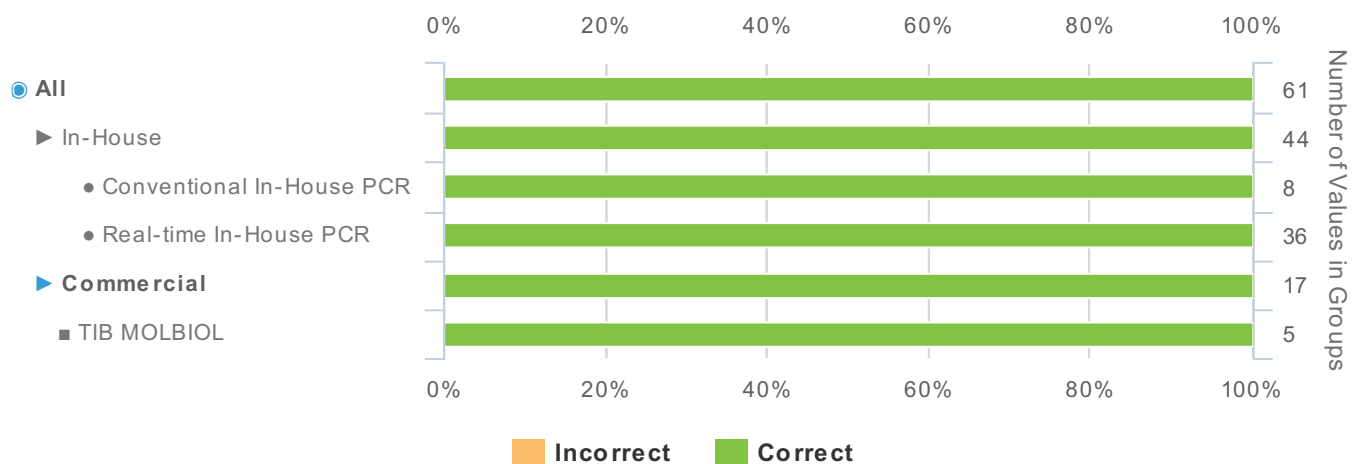
Groups below n=5: InterLabService (n=1), InterLabService - InterLabService AmpliSens (n=1), Hain Lifescience (n=1), Hain Lifescience - Hain Lifescience FlouroType (n=1), ELITech Group (n=1), ELITech Group - Elitech Alert Oligomix kit (n=1), Roche (n=2), Roche - Roche LightCycler (n=2), gerbion (n=1), gerbion - gerbion Real Time PCR (n=1), PathoFinder (n=1), PathoFinder - PathoFinder Real Time PCR (n=1), GeneProof (n=3), GeneProof - GeneProof Real Time PCR kit (n=3), QIAGEN (n=2), QIAGEN - Qiagen PCR reagents (n=1), QIAGEN - Qiagen Artus Real Time (n=1)

Groups Rolled Up: TIB MOLBIOL - TIB-MolBioI LightMix (n=5)

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BbDNA16-10 - Qualitative Results Breakdown

Sample Code	Sample Content	Matrix	Sample Relationships	Detection Frequency	Sample Status	Percentage Correct All	
						(%)	(n)
BbDNA16-10	Borrelia bavariensis	BHI Broth	DS3_2	Frequently Detected	CORE	100.0	61



Groups below n=5: InterLabService (n=1), InterLabService - InterLabService AmpliSens (n=1), Hain Lifescience (n=1), Hain Lifescience - Hain Lifescience FlouroType (n=1), ELITech Group (n=1), ELITech Group - Elitech Alert Oligomix kit (n=1), Roche (n=2), Roche - Roche LightCycler (n=2), gerbion (n=1), gerbion - gerbion Real Time PCR (n=1), PathoFinder (n=1), PathoFinder - PathoFinder Real Time PCR (n=1), GeneProof (n=3), GeneProof - GeneProof Real Time PCR kit (n=3), QIAGEN (n=2), QIAGEN - Qiagen PCR reagents (n=1), QIAGEN - Qiagen Artus Real Time (n=1)

Groups Rolled Up: TIB MOLBIOL - TIB-MolBioI LightMix (n=5)

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