

RESOURCE LIST

OIE *Terrestrial Manual* 2010 1 (on-line updates)

C H A P T E R 1.1.4 / 5

PRINCIPLES AND METHODS OF VALIDATION OF DIAGNOSTIC ASSAYS FOR INFECTIOUS DISEASES

http://www.oie.int/eng/normes/mmanual/2008/pdf/1.1.04_VALID.pdf

This thoroughly revised chapter replaces Chapter 1.1.4 Principles of validation of diagnostic assays for infectious diseases and Chapter 1.1.5 Validation and quality control of polymerase chain reaction methods used for the diagnosis of infectious diseases from the sixth edition of the OIE *Terrestrial Manual*. Adopted in May 2009.

C H A P T E R 1.1.7.

BIOTECHNOLOGY IN THE DIAGNOSIS OF INFECTIOUS DISEASES AND VACCINE DEVELOPMENT

http://www.oie.int/eng/normes/mmanual/2008/pdf/1.1.07_BIOTECHNOLOGY.pdf

OIE *Terrestrial Manual* 2008

GLOSSARY OF TERMS

http://www.oie.int/eng/normes/mmanual/2008/pdf/0.04_GLOSSARY.pdf

OIE *Quality Standard and Guidelines for Veterinary Laboratories: Infectious Diseases*, 2nd Ed., 2008 (ISBN: 978-92-9044-706-1) (hard copy only available)

'Understanding Ct' from Applied Biosystems.

http://www3.appliedbiosystems.com/cms/groups/mcb_marketing/documents/generaldocuments/cms_053906.pdf

A number of other short information bulletins related to aspects of PCR are available on AB website.

Website link to the guidelines the Center for Veterinary Biologics for diagnostic test kit licensing. While the title implies this is for ELISA based assays, it is still relevant for PCR based test kits.

http://www.aphis.usda.gov/animal_health/vet_biologics/publications/memo_800_73.pdf

Validation of Laboratory-Developed Molecular Assays for Infectious Diseases.

Eileen M. Burd* CLINICAL MICROBIOLOGY REVIEWS, July 2010, p. 550–576 Vol. 23, No. 3

<http://cmr.asm.org/cgi/content/full/23/3/550?view=long&pmid=20610823> (subscribers access)

.The MIQE guidelines: minimum information for publication of quantitative real-time PCR experiments. [Bustin SA](#), [Benes V](#), [Garson JA](#), [Hellemans J](#), [Huggett J](#), [Kubista M](#), [Mueller R](#), [Nolan T](#), [Pfaffl MW](#), [Shiple GL](#), [Vandesompele J](#), [Wittwer CT](#). *Clin Chem*. 2009 Apr;55(4):611-22. Epub 2009 Feb 26 Centre for Academic Surgery, Institute of Cell and Molecular Science, Barts and the London School of Medicine and Dentistry, London, UK. s.a.bustin@qmul.ac.uk <http://www.clinchem.org/cgi/content/full/55/4/611>

A practical approach to RT-qPCR-Publishing data that conform to the MIQE guidelines.

[Taylor S](#), [Wakem M](#), [Dijkman G](#), [Alsarraj M](#), [Nguyen M](#). Bio-Rad Laboratories, Inc., Hercules, CA 94547, USA. [Methods](#). 2010 Apr;50(4):S1-5.

http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6WN5-4YJCGVW-3&_user=4421&_coverDate=04%2F30%2F2010&_rdoc=1&_fmt=high&_orig=search&_origin=s

[earch& sort=d& docanchor=&view=c& acct=C000059598& version=1& urlVersion=0& userid=4421&md5=9459231515dad5840b0323422f6b0507&searchtype=a](#)

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MIQE précis: Practical implementation of minimum standard guidelines for fluorescence-based quantitative real-time PCR experiments. Stephen A Bustin,¹ Jean-François Beaulieu,² Jim Huggett,³ Rolf Jaggi,⁴ Frederick SB Kibenge,⁵ Pål A Olsvik,⁶ Louis C Penning,⁷ and Stefan Toegel⁸

BMC Mol Biol. 2010; 11: 74. Published online 2010 September 21. [10.1186/1471-2199-11-74](#).
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2955025/?tool=pubmed>

Biosearch Technologies has FAQ approach to qPCR assay design on their web page. In addition to listings of papers, presentations and posters.

<http://www.biosearchtech.com/support/faqs/qpcr-assay-design-and-optimization.aspx>

Qiagen has publications and webinars under Support on their web page and include brochures and application guides, handbooks and protocols and recorded webinars.

<http://www.qiagen.com/literature/brochures/default.aspx>

The Future of qPCR: Best practices, Standardization, and the MIQE Guidelines

Thursday, 30 September 2010. Even as qPCR grows in popularity, it is being recognized that there are some challenges associated with the technology, particularly with respect to reproducibility within and between laboratories. Fortunately, many of these limitations can be addressed through a standardized set of best practices. Using the recently published MIQE guidelines as a foundation, our expert panel will address the best practices of qPCR, with the goal of providing researchers with more consistent and reliable data.

During the webinar, the panelists will:

- provide an overview of the MIQE guidelines
- address qPCR applications and primary challenges
- outline best practices and assay design to get the best out of your qPCR
- describe the essential quality control steps, including nucleic acid quantification

Webinar is available at: <http://tinyurl.com/38b3fzs> Webinar is produced by the *Science*/AAAS Business Office and sponsored by Thermo Scientific NanoDrop & Solaris Products