

## Selected References for GelRed™ and GelGreen™

### GelRed, agarose gels

- Boulet, G.A., Micalessi, I.M., Horvath, C.A., Benoy, I.H., Depuydt, C.E., and Bogers, J.J. (2010). Nucleic acid sequence-based amplification assay for human papillomavirus mRNA detection and typing: evidence for DNA amplification. *J Clin Microbiol* 48, 2524-2529.
- Casu, R.E., Selivanova, A., and Perroux, J.M. (2012). High-throughput assessment of transgene copy number in sugarcane using real-time quantitative PCR. *Plant Cell Rep* 31, 167-177.
- Civit, L, Fragoso, A, and O'Sullivan, CK. Evaluation of techniques for generation of single-stranded DNA for quantitative detection. *Anal Biochem* 2012 431: 132-138.
- Ducatez, M.F., Sonnberg, S., Hall, R.J., Peacey, M., Ralston, J., Webby, R.J., and Huang, Q.S. (2010). Genotyping assay for the identification of 2009-2010 pandemic and seasonal H1N1 influenza virus reassortants. *J Virol Methods* 168, 78-81.
- Gabor, M. (2011). Genotyping Single Nucleotide Polymorphism C4685T in 14.Intron of Bovine CAPN1 Gene by Rapid Tetra-Primer ARMS-PCR Method. *Animal Science and Biotechnologies* 44, 209-212.
- Kwong, F.N., Richardson, S.M., and Evans, C.H. (2008). Chordin knockdown enhances the osteogenic differentiation of human mesenchymal stem cells. *Arthritis Res Ther* 10, R65.
- Lebbad, M., Ankarklev, J., Tellez, A., Leiva, B., Andersson, J.O., and Svard, S. (2008). Dominance of Giardia assemblage B in Leon, Nicaragua. *Acta Trop* 106, 44-53.
- Machado, V. (2008). Molecular Characterization of Host Strains of *Spodoptera frugiperda* (Lepidoptera: Noctuidae) in Southern Brazil. *ANNALS OF THE ENTOMOLOGICAL SOCIETY OF AMERICA* 101, 619-626.
- Podder, M., Ruan, J., Tripp, B.W., Chu, Z.E., and Tebbutt, S.J. (2008). Robust SNP genotyping by multiplex PCR and arrayed primer extension. *BMC Med Genomics* 1, 5.
- Qin, Y, Fu, D., Liu, M., Liang, Y., and Wu, S. Optimization of microsatellite DNA Gelred fluorescence imaging technology. *African Journal of Biotechnology* 2012 11: 14749-14754.
- Ragone, S., Maman, J.D., Furnham, N., and Pellegrini, L. (2008). Structural basis for inhibition of homologous recombination by the RecX protein. *EMBO J* 27, 2259-2269.
- Rogers, G.B., Stressmann, F.A., Koller, G., Daniels, T., Carroll, M.P., and Bruce, K.D. (2008). Assessing the diagnostic importance of nonviable bacterial cells in respiratory infections. *Diagn Microbiol Infect Dis* 62, 133-141.
- Wolfson, J.J., May, K.L., Thorpe, C.M., Jandhyala, D.M., Paton, J.C., and Paton, A.W. (2008). Subtilase cytotoxin activates PERK, IRE1 and ATF6 endoplasmic reticulum stress-signalling pathways. *Cell Microbiol* 10, 1775-1786.

### GelRed, DNA restriction digests

- Boulet, G.A., Micalessi, I.M., Horvath, C.A., Benoy, I.H., Depuydt, C.E., and Bogers, J.J. (2010). Nucleic acid sequence-based amplification assay for human papillomavirus mRNA detection and typing: evidence for DNA amplification. *J Clin Microbiol* 48, 2524-2529.
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### GelRed, PCR products

- Casu, R.E., Selivanova, A., and Perroux, J.M. (2012). High-throughput assessment of transgene copy number in sugarcane using real-time quantitative PCR. *Plant Cell Rep* 31, 167-177.
- Ducatez, M.F., Sonnberg, S., Hall, R.J., Peacey, M., Ralston, J., Webby, R.J., and Huang, Q.S. (2010). Genotyping assay for the identification of 2009-2010 pandemic and seasonal H1N1 influenza virus reassortants. *J Virol Methods* 168, 78-81.

- Feng, J., and Jan, C.C. (2008). Introgression and molecular tagging of Rf (4), a new male fertility restoration gene from wild sunflower *Helianthus maximiliani* L. *Theor Appl Genet* 117, 241-249.
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- Kataoka, R. (2008). Comparison of the bacterial communities established on the mycorrhizae formed on *Pinus thunbergii* root tips by eight species of fungi. *Plant Soil* 304, 267-275.
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- Machado, V. (2008). Molecular Characterization of Host Strains of *Spodoptera frugiperda* (Lepidoptera: Noctuidae) in Southern Brazil. *ANNALS OF THE ENTOMOLOGICAL SOCIETY OF AMERICA* 101, 619-626.
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- Xu, Y. (2008). Bacterial communities in soybean rhizosphere in response to soil type, soybean genotype, and their growth stage. *Soil Biology & Biochemistry* 41, 919-925.

### **GelRed, RNA samples**

- Alon, S., Vigneault, F., Eminaga, S., Christodoulou, D.C., Seidman, J.G., Church, G.M., and Eisenberg, E. (2011). Barcoding bias in high-throughput multiplex sequencing of miRNA. *Genome Res* 21, 1506-1511.
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- Derks, N.M., Muller, M., Gaszner, B., Tilburg-Ouwens, D.T., Roubos, E.W., and Kozicz, L.T. (2008). Housekeeping genes revisited: different expressions depending on gender, brain area and stressor. *Neuroscience* 156, 305-309.
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### **GelRed, polyacrylamide gels**

- Feng, J., and Jan, C.C. (2008). Introgression and molecular tagging of Rf (4), a new male fertility restoration gene from wild sunflower *Helianthus maximiliani* L. *Theor Appl Genet* 117, 241-249.
- Qin, Y, Fu, D., Liu, M., Liang, Y., and Wu, S. Optimization of microsatellite DNA Gelred fluorescence imaging technology. *African Journal of Biotechnology* 2012 11: 14749-14754.

### **GelRed, DGGE gels**

- Kataoka, R. (2008). Comparison of the bacterial communities established on the mycorrhizae formed on *Pinus thunbergii* root tips by eight species of fungi. *Plant Soil* 304, 267-275.
- Xu, Y. (2008). Bacterial communities in soybean rhizosphere in response to soil type, soybean genotype, and their growth stage. *Soil Biology & Biochemistry* 41, 919-925.

### **GelRed, PFGE gels**

- Ikeda-Dantsuji, Y., Hanaki, H., Sakai, F., Tomono, K., Takesue, Y., Honda, J., Nonomiya, Y., Suwabe, A., Nagura, O., Yanagihara, K., et al. (2011). Linezolid-resistant *Staphylococcus aureus* isolated from 2006 through 2008 at six hospitals in Japan. *J Infect Chemother* 17, 45-51.
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### **GelRed, EMSA gels**

- Liu, Y., Hu, Y., Li, X., Niu, L., and Teng, M. (2010). The crystal structure of the human nascent polypeptide-associated complex domain reveals a nucleic acid-binding region on the NACA subunit. *Biochemistry* 49, 2890-2896.
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### **Gel purification of GelRed-stained DNA for cloning, sequencing**

- Boulet, G.A., Micalessi, I.M., Horvath, C.A., Benoy, I.H., Depuydt, C.E., and Bogers, J.J. (2010). Nucleic acid sequence-based amplification assay for human papillomavirus mRNA detection and typing: evidence for DNA amplification. *J Clin Microbiol* 48, 2524-2529.
- Kataoka, R. (2008). Comparison of the bacterial communities established on the mycorrhizae formed on *Pinus thunbergii* root tips by eight species of fungi. *Plant Soil* 304, 267-275.
- Lebbad, M., Ankarklev, J., Tellez, A., Leiva, B., Andersson, J.O., and Svard, S. (2008). Dominance of *Giardia* assemblage B in Leon, Nicaragua. *Acta Trop* 106, 44-53.
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- Xu, Y. (2008). Bacterial communities in soybean rhizosphere in response to soil type, soybean genotype, and their growth stage. *Soil Biology & Biochemistry* 41, 919-925.

### **Western blotting after GelRed staining**

- Casu, R.E., Selivanova, A., and Perroux, J.M. (2012). High-throughput assessment of transgene copy number in sugarcane using real-time quantitative PCR. *Plant Cell Rep* 31, 167-177.

### **GelRed, other applications**

#### **Flow cytometry-based cell viability assay using GelRed as a vital dye**

- Bergwerf, I., De Vocht, N., Tambuyzer, B., Verschueren, J., Reekmans, K., Daans, J., Ibrahim, A., Van Tendeloo, V., Chatterjee, S., Goossens, H., et al. (2009). Reporter gene-expressing bone marrow-derived stromal cells are immune-tolerated following implantation in the central nervous system of syngeneic immunocompetent mice. *BMC Biotechnol* 9, 1.

#### **GelRed, mutation detection enhancement (MDE) gels**

- Brow, C.N., Johnson, R.O., Xu, M., Johnson, R.L., and Simon, H.M. (2010). Effects of cryogenic preservation and storage on the molecular characteristics of microorganisms in sediments. *Environ Sci Technol* 44, 8243-8247.

#### **GelRed, nitocellulose-based protein/RNA binding assay**

- Khoshnevis, S., Neumann, P., and Ficner, R. (2010). Crystal structure of the RNA recognition motif of yeast translation initiation factor eIF3b reveals differences to human eIF3b. *PLoS One* 5.

### **GelRed, comet assay**

Kozak, J., West, C.E., White, C., da Costa-Nunes, J.A., and Angelis, K.J. (2009). Rapid repair of DNA double strand breaks in *Arabidopsis thaliana* is dependent on proteins involved in chromosome structure maintenance. *DNA Repair (Amst)* 8, 413-419.

### **GelRed staining of virus capsids on PVDF membranes**

Newcomb, W.W., and Brown, J.C. (2009). Time-dependent transformation of the herpesvirus tegument. *J Virol* 83, 8082-8089.

### **GelRed, agarose gel analysis of ssDNA after strand exchange assay**

Ragone, S., Maman, J.D., Furnham, N., and Pellegrini, L. (2008). Structural basis for inhibition of homologous recombination by the RecX protein. *EMBO J* 27, 2259-2269.

### **GelRed, agarose gel analysis of fragmented DNA from apoptotic cells**

Wolfson, J.J., May, K.L., Thorpe, C.M., Jandhyala, D.M., Paton, J.C., and Paton, A.W. (2008). Subtilase cytotoxin activates PERK, IRE1 and ATF6 endoplasmic reticulum stress-signalling pathways. *Cell Microbiol* 10, 1775-1786.

### **GelGreen, agarose gels, PCR products, gel purification for cloning or sequencing**

Bradbury, I.R. (2010). Evidence for divergence and adaptive isolation in post-glacially derived bimodal allopatric and sympatric rainbow smelt populations. *Biological Journal of the Linnean Society* 101, 583-594.

Madala, N.E., Leone, M.R., Molinaro, A., and Dubery, I.A. (2011). Deciphering the structural and biological properties of the lipid A moiety of lipopolysaccharides from *Burkholderia cepacia* strain ASP B 2D, in *Arabidopsis thaliana*. *Glycobiology* 21, 184-194.

### **GelGreen, polyacrylamide gels**

Takekuma, H., Suetake, I., and Tajima, S. (2008). Mouse Dnmt3a preferentially methylates linker DNA and is inhibited by histone H1. *J Mol Biol* 383, 810-821.

### **GelGreen, DGGE gels**

Portney, N.G., Wu, Y., Quezada, L.K., Lonardi, S., and Ozkan, M. (2008). Length-based encoding of binary data in DNA. *Langmuir* 24, 1613-1616.

Sutton, N.B., van der Kraan, G.M., van Loosdrecht, M.C., Muyzer, G., Bruining, J., and Schotting, R.J. (2009). Characterization of geochemical constituents and bacterial populations associated with As mobilization in deep and shallow tube wells in Bangladesh. *Water Res* 43, 1720-1730.

### **GelGreen, imaging of single DNA molecules by fluorescence microscopy**

Suzuki, M. (2009). Protamine-induced DNA compaction but not aggregation shows effective radioprotection against double-strand breaks. *Chemical Physics Letters* 480, 113-117.

### **GelGreen, other applications**

Lee, J.B., Peng, S., Yang, D., Roh, Y.H., Funabashi, H., Park, N., Rice, E.J., Chen, L., Long, R., Wu, M., et al. (2012). A mechanical metamaterial made from a DNA hydrogel. *Nat Nanotechnol* 7, 816-820.