

dsGreen for Real-Time PCR, 100x

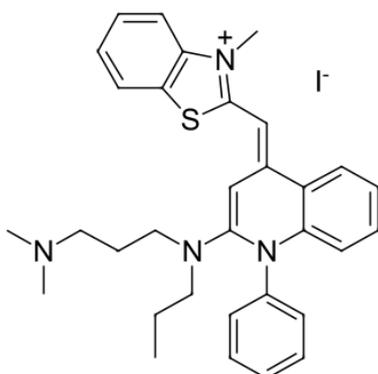
<http://www.lumiprobe.com/p/sybrgreen-realtime-pcr>

dsGreen, an analog of SYBR® Green I, is a very sensitive dsDNA detection dye. High sensitivity, and high selectivity for dsDNA allow to use dsGreen as a universal dsDNA detection reagent for qPCR. No need to use labeled probes to detect amplification with dsGreen – unlabeled primers are sufficient.

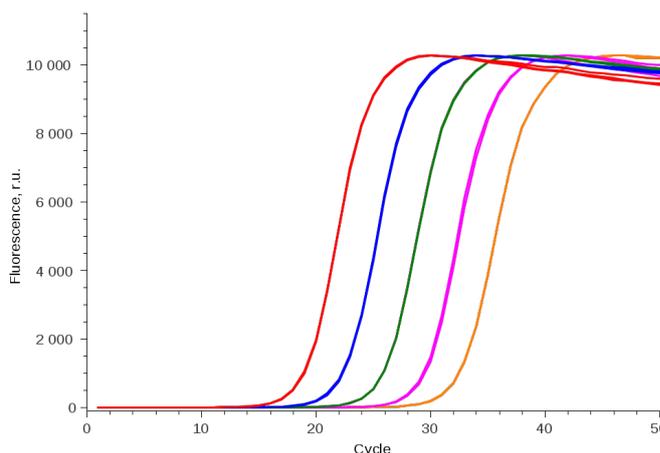
Unlike other preparations of dsGreen provided by Lumiprobe for gel staining purposes, this formulation is specially designed to be used in real-time PCR experiments. Specific features are:

- Concentration of the dye is optimized for qPCR and carefully adjusted for reproducible results from lot to lot.
- PCR tested preparation – quality guaranteed
- Low fluorescence background – high fluorescence intensity gain

Note: fluorescent properties of dsGreen bound to dsDNA below are taken from the following publication: Zipper, H.; Brunner, H.; Bernhagen, J.; Vitzthum, F. Investigations on DNA intercalation and surface binding by SYBR Green I, its structure determination and methodological implications. *Nucleic Acids Res.*, 2004, 32, e103.



dsGreen structure



qPCR curves with dsGreen

General properties

Appearance:	light orange solution
Quality control:	NMR ¹ H, HPLC-MS (95%), PCR testing
Storage conditions:	Storage: 24 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light.
TN VED Code:	3204190000

Spectral properties

Excitation maximum, nm:	454
ε, L·mol ⁻¹ ·cm ⁻¹ :	73000
Emission maximum, nm:	524
Fluorescence quantum yield:	0,8

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