

Ploidy and genome size analysis

# CyStain OxProtect reagents

Optimise DNA measurements  
in oxidative plant samples

New



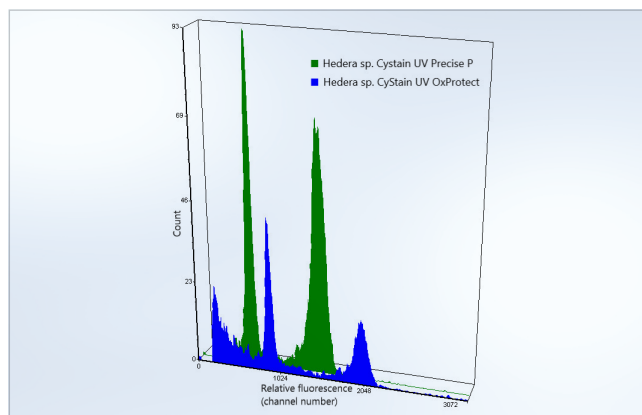
# CyStain UV OxProtect and CyStain PI OxProtect

## Optimised analysis of oxidation-sensitive samples

Flow cytometry (FCM) is a commonly used method for estimating genome size and ploidy in plants. In many plants, the presence of endogenous oxidants or fluorescence inhibitors can cause an inaccurate estimation of genome size, thus falsifying the relationship between genome size and phenotypic traits/ecological performance.

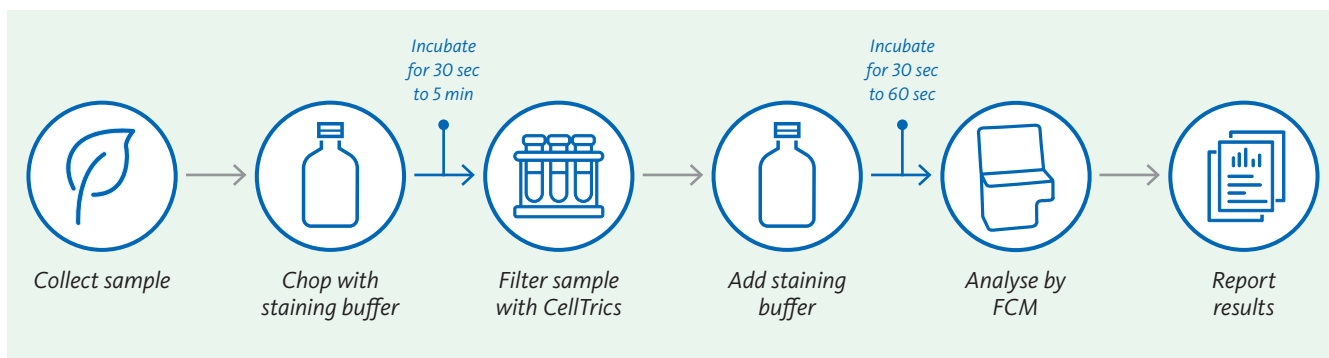
**CyStain OxProtect** reagents are a new formulation of our CyStain reagents that have been developed to prevent oxidation and artefacts in such samples. These ready-to-use reagents offer:

- Increased stability of peak position over time (no peak shift)
- Enhanced accuracy (lower CV% values)
- Improved reproducibility between users
- Easy handling (ready-to-use reagent, measurement less time-critical)
- Results from previously inaccessible sample types (i.e. silica-gel preserved samples<sup>1</sup>)
- A Triton™ X-100-free formulation<sup>2</sup>



Reagent	Sysmex order code	Suitable flow cytometer systems
CyStain UV OxProtect	ZPS40612	Equipped with UV excitation source
CyStain PI OxProtect	ZPS40613	Equipped with green (or blue) excitation source

## Typical analysis workflow



Visit our website to find out more about our full portfolio of **dedicated solutions for ploidy and genome size analysis:** CyStain reagents, CellTrics filters and flow cytometers

<sup>1</sup> A target capture-based method estimate ploidy from herbarium specimens. (2019). Viruel J. et al. Frontiers in plant science. doi: 10.3389/fpls.2019.00937

<sup>2</sup> Triton™ is a trade mark of The Dow Company or an affiliated company of Dow. Restricted under REACH Regulation 1907/2006/EC, Annex XIV.

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