

THE MULTIFLOW[®] FAMILY OF KITS

Multiple endpoints. One step.

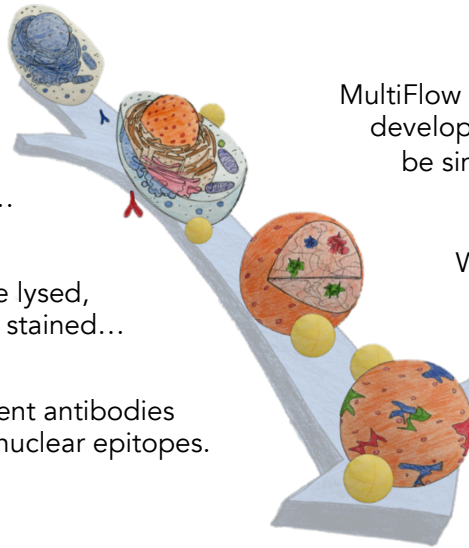
The Method

In just one step:

reagents are added
to cells...

outer membranes are lysed,
nuclei are stained...

and fluorescent antibodies
bind to nuclear epitopes.



MultiFlow add-and-read kits were
developed from the ground up to
be simple and efficient.

When microtiter plates are used to
collect these multiplexed data, the
amount of test compound necessary
for analysis is dramatically reduced.

At this point nuclei are ready
for flow cytometric analysis.

Benefits

- High information content
- Multiplexed assay format
- Simple and efficient
- Fast, flow cytometric analysis
- Scalable – compatible with microtiter plates and robotic liquid handlers

Available Kits

Kit Name	Applications	
MultiFlow – Cleaved PARP	• Apoptosis	Each kit also provides: • Cell density • Cell proliferation • Cytotoxicity
MultiFlow – γ H2AX	• Double strand DNA breaks	
MultiFlow – Phospho-Histone H3	• Mitotic cells	
MultiFlow – p53	• Genotoxic stress	
MultiFlow DNA Damage Kit – p53, γ H2AX, Phospho-Histone H3	• DNA damage response • Genotoxic Mode of Action	
MultiFlow DNA Damage Kit – Cleaved PARP, γ H2AX, Phospho-Histone H3	• DNA damage response • Genotoxic Mode of Action	
MultiFlow DNA Damage Kit – p53, γ H2AX, Phospho-Histone H3, Cleaved PARP	• DNA damage response • Genotoxic Mode of Action • Apoptosis	

MULTIFLOW[®] – PHOSPHO-HISTONE H3 KIT

Multiple endpoints. One step.

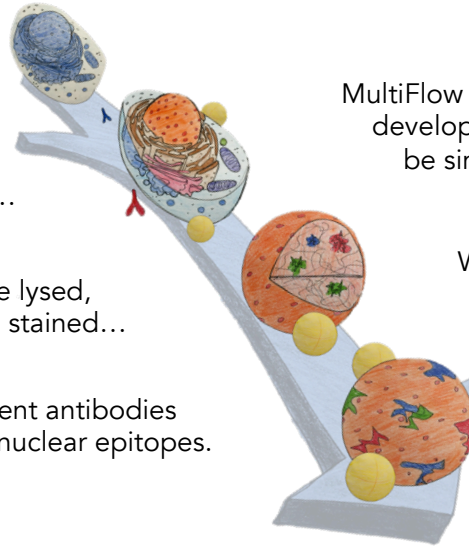
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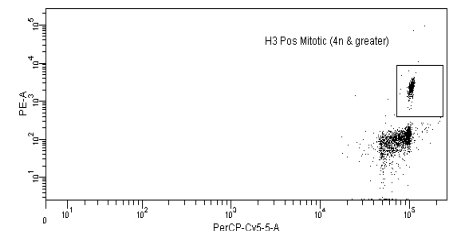
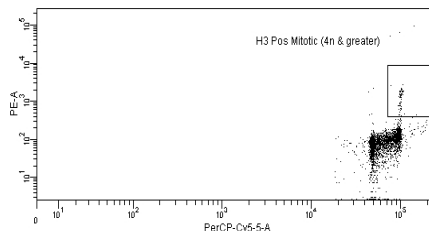
- Mitotic cells via Phospho-Histone H3
- Cell density
- Cell proliferation
- Cytotoxicity

Benefits

- High Information Content
- Multiplexed Assay format
- Simple and efficient
- Fast, flow cytometric analysis
- Scalable – compatible with microtiter plates and robotic liquid handlers

Sample Plots

Compared to the negative control (left), four hours of exposure to vinblastine induced a large number of phospho-histone H3-positive events (right).



MULTIFLOW[®] – CLEAVED PARP KIT

Multiple endpoints. One step.

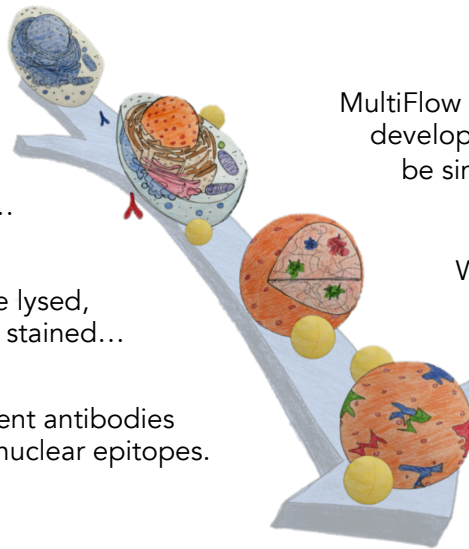
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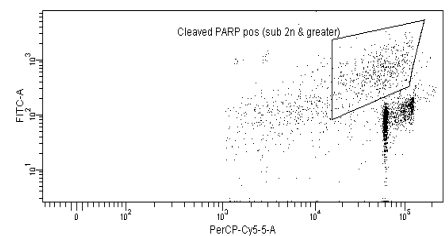
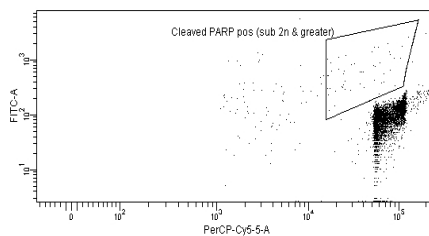
- Apoptosis via cleaved PARP
- Cell density
- Cell proliferation
- Cytotoxicity

Benefits

- High Information Content
- Multiplexed Assay format
- Simple and efficient
- Fast, flow cytometric analysis
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Sample Plots

Compared to the negative control (left), 24 hours of continuous exposure to CCCP induces a large fluorescence shift (right).



MULTIFLOW[®] – γ H2AX KIT

Multiple endpoints. One step.

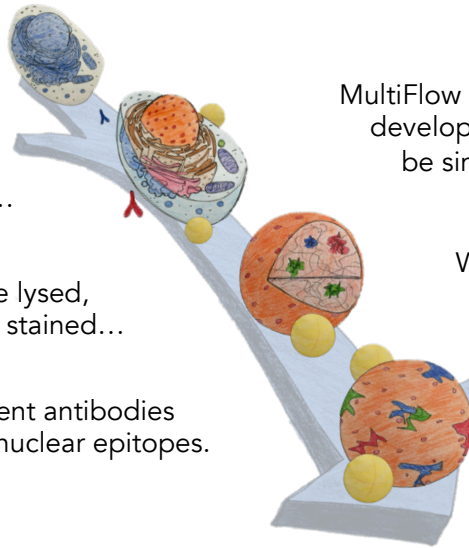
The Method

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outer membranes are lysed, nuclei are stained...

and fluorescent antibodies bind to nuclear epitopes.



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Endpoints

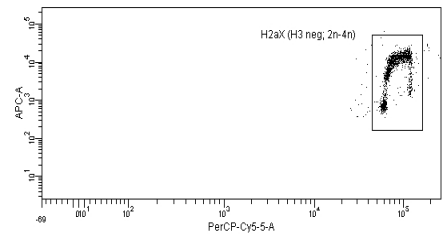
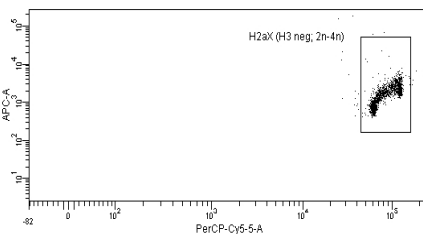
- Double strand DNA breaks via γ H2AX
- Cell density
- Cell proliferation
- Cytotoxicity

Benefits

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Sample Plots

Compared to the negative control (left) 4 hours of exposure to camptothecin induced a large fluorescence shift (right).



MULTIFLOW[®] – p53 KIT

Multiple endpoints. One step.

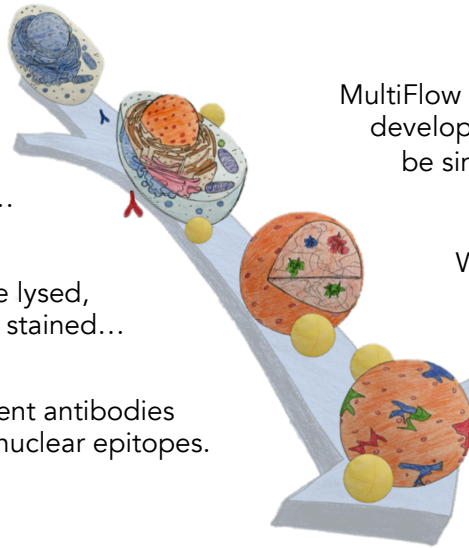
The Method

In just one step:

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outer membranes are lysed, nuclei are stained...

and fluorescent antibodies bind to nuclear epitopes.



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Endpoints

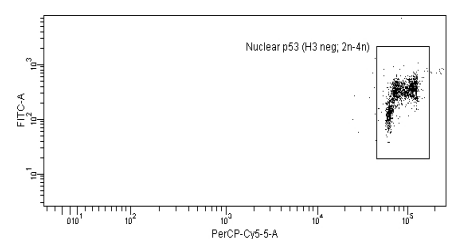
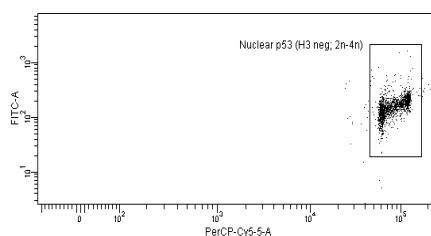
- Genotoxic stress via p53
- Cell density
- Cell proliferation
- Cytotoxicity

Benefits

- High Information Content
- Multiplexed Assay format
- Simple and efficient
- Fast, flow cytometric analysis
- Scalable – compatible with microtiter plates and robotic liquid handlers

Sample Plots

Compared to the negative control (left) 4 hours of exposure to camptothecin induced a large fluorescence shift (right).



MULTIFLOW[®] DNA DAMAGE KIT

p53, γ H2AX, PHOSPHO-HISTONE H3

Multiple endpoints. One step.

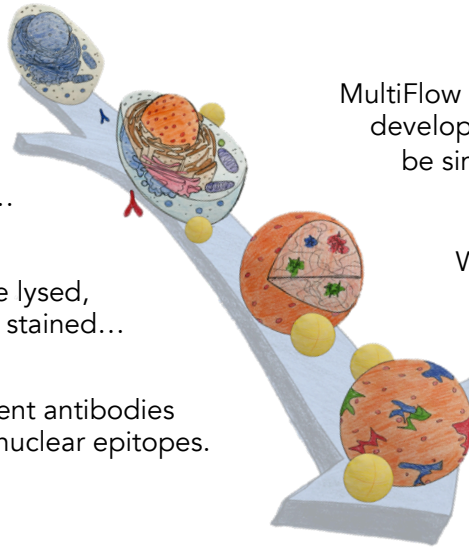
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Endpoints

- Genotoxic stress via p53
- Double strand DNA breaks via γ H2AX
- Mitotic cells via phospho-histone H3
- Cell density
- Cell proliferation
- Cytotoxicity

Benefits

- High Information Content
- Multiplexed Assay format
- Simple and efficient
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MULTIFLOW[®] DNA DAMAGE KIT

CLEAVED PARP, γ H2AX, PHOSPHO-HISTONE H3

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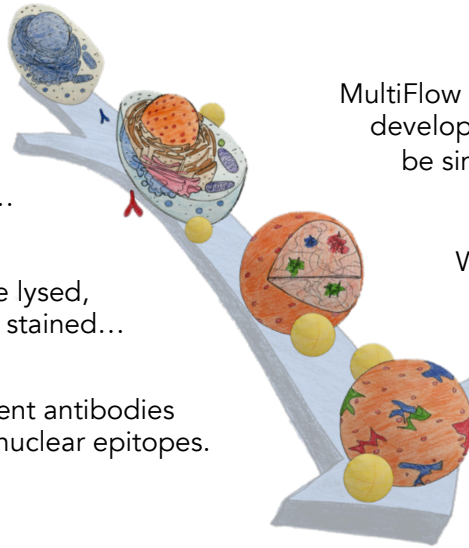
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Endpoints

- Apoptosis via cleaved PARP
- Double strand DNA breaks via γ H2AX
- Mitotic cells via phospho-histone H3
- Cell density
- Cell proliferation
- Cytotoxicity

Benefits

- High Information Content
- Multiplexed Assay format
- Simple and efficient
- Fast, flow cytometric analysis
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MULTIFLOW[®] DNA DAMAGE KIT

p53, γ H2AX, PHOSPHO-HISTONE H3, CLEAVED PARP

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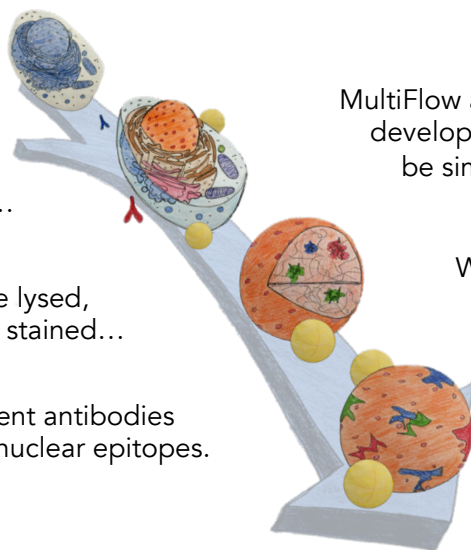
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Endpoints

- Genotoxic stress via p53
- Double strand DNA breaks via γ H2AX
- Mitotic cells via phospho-histone H3
- Apoptosis via cleaved PARP
- Cell density and cell proliferation
- Cytotoxicity

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