



## The true solution is

- HiTech antigen test
- Automated and easy to use
- Laboratory quality at point of care

mariPOC<sup>®</sup> utilizes TPX (Two-Photon Excitation) assay technique for highly sensitive and extremely specific antigen detection. The technology is proprietary to ArcDia International Ltd., the developer and manufacturer of mariPOC<sup>®</sup> from Finland.

### High sensitivity

mariPOC<sup>®</sup> offers the best antigen detection sensitivity at the point of care.

**Superior specificity** is the unique feature of the mariPOC<sup>®</sup> technique. It results from the use of the sandwich immunoassay principle. mariPOC<sup>®</sup> test result is not interfered by nonspecific binding.

### mariPOC<sup>®</sup> is unique

Specificity is further improved by the use of 3 µm polystyrene microparticles as the reaction solid phase. Fluorescence of individual microparticles is measured one at the time with laser. Also the fluorescence signal of the surrounding matrix is recorded. Finally a clever data reduction algorithm returns the quantitative test result.

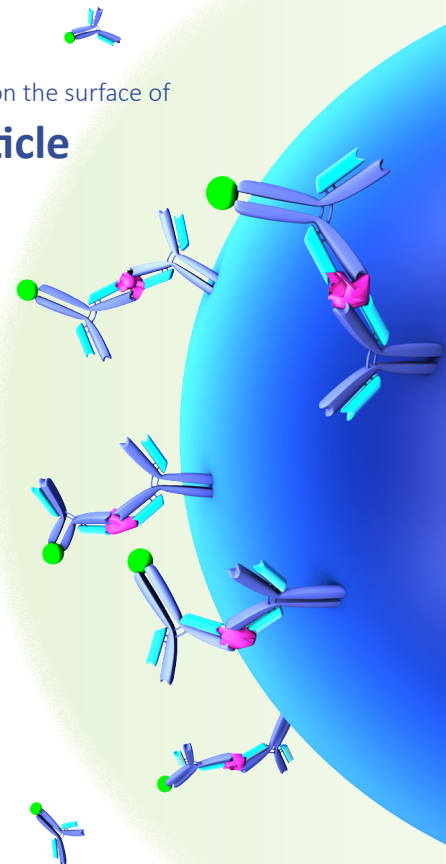
The TPX-technology brings antigen testing to the 3D level. The unique technology provides ease of use, efficiency and accuracy. mariPOC<sup>®</sup> detection is automated and separation-free. It is applicable for various sample materials.

Reference: A New Microvolume Technique for Bioaffinity Assays Using Two-Photon Excitation. Hänninen et al. Nat Biotechnol. 2000;18(5):548–50.

More information: [www.maripoc.com](http://www.maripoc.com)

3D immunoassay reaction on the surface of

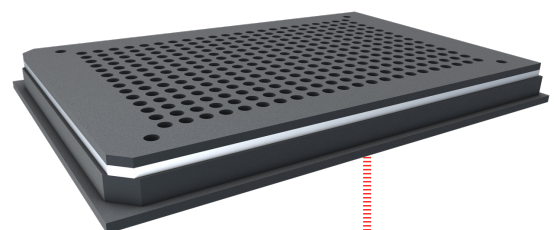
### microparticle



Each pathogen specific assay is carried out in

### individual well

of the test plate



Two-photon excitation with **laser**

Fluorescent detection through the bottom of the **test plate**



# Performance

## Laboratory Quality at the Point of Care



mariPOC® compared to	Sample type	Sensitivity	Specificity	N
<b>TR-FIA</b>				
Influenza A virus	swab/aspirate	100 %	100 %	102
Influenza B virus	swab/aspirate	~100 % *	~100 %**	NA
Respiratory syncytial virus	swab/aspirate	100 %	100 %	94
Parainfluenza 1 virus	swab/aspirate	~100 % *	100 %	55
Parainfluenza 2 virus	swab/aspirate	~100 % *	99.0 %	55
Parainfluenza 3 virus	swab/aspirate	~100 % *	100 %	95
Adenovirus	swab/aspirate	92 %	100 %	95
<b>ELISA</b>				
Human metapneumovirus	swab	~100 % *	100 %	43
<b>DFA</b>				
Influenza A virus	aspirate	86 %	100 %	241
Respiratory syncytial virus	aspirate	90 %	99.5 %	241
<b>Lateral flow</b>				
Influenza A virus	wash	100 %	100 %	104
Influenza B virus	wash	100 %	100 %	104
<i>Streptococcus pneumoniae</i>	NA	~100 %*	~100 %**	NA
<b>Viral culture</b>				
Parainfluenza 3 virus	wash	100 %	100 %	192
Adenovirus	wash	100 %	99.5 %	192
<b>PCR</b>				
Influenza A virus	aspirate/wash	92 %	100 %	192
Influenza B virus	aspirate/wash	88 %	100 %	192
Respiratory syncytial virus	swab	89 %	100 %	158
Human metapneumovirus	aspirate/wash	78 %	100 %	74
<b>Bacterial culture</b>				
Group A streptococci	swab	~150 %	~100 % **	219

\*) Sensitivity proved to be similar to comparison method using dilution series from positive samples

\*\*) No cross-reactions with other respiratory pathogens or commensal flora detected