



Labrox

Next generation instrument solutions

# Labrox – Instruments

## ”Detect Well”

Labrox is a Finnish SME specializing in development and manufacturing of multimode plate readers and measurement components  
For OEM partners and direct sales

- ✓ Multimode readers
- ✓ Measurement heads
- ✓ POCT/Lateral Flow units



# UPCON™ TEAM

JOINT VENTURE BY TWO LIFE SCIENCE  
COMPANIES OPERATING IN FINLAND

**Labrox Oy**

**[www.labrox.fi](http://www.labrox.fi)**

✓ Instrumentation and detection of light

**Kaivogen Oy**

**[www.kaivogen.com](http://www.kaivogen.com)**

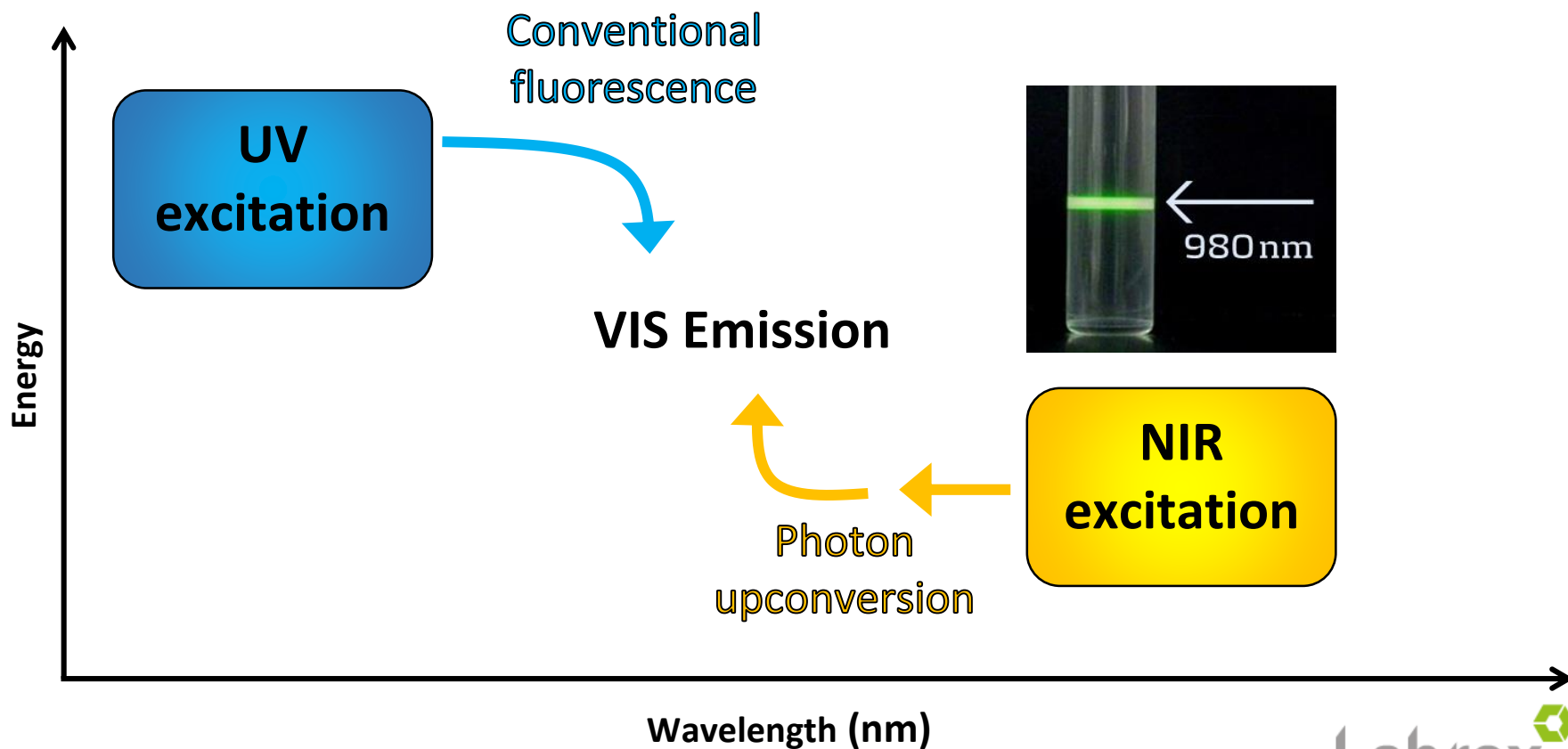
✓ Bioaffinity assay reagents and custom service



# PHOTON UPCONVERSION

Near-Infrared Excitation (980 NM)

Visible Emission (540 & 655 NM)

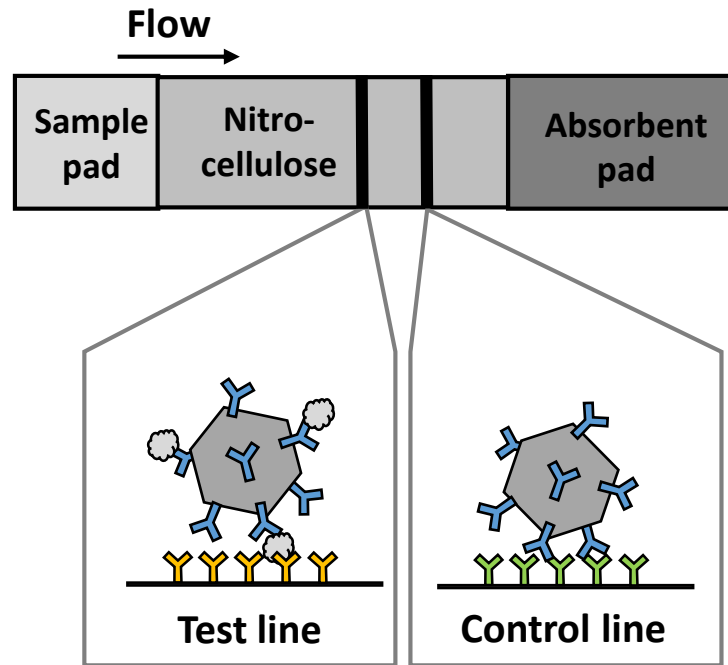


# APPLICATION AREAS

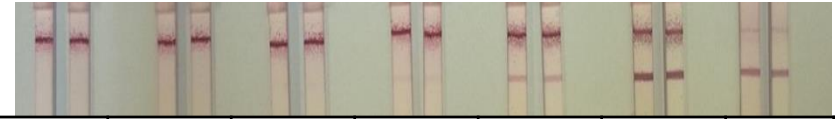
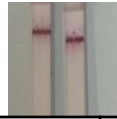
## DIAGNOSTICS & BIOANALYTICS

- ✓ Bioaffinity assays
- ✓ Lateral flow tests
- ✓ Multiplexing

**HIGH  
SENSITIVITY**



# GOLD NANOPARTICLES (visual detection)



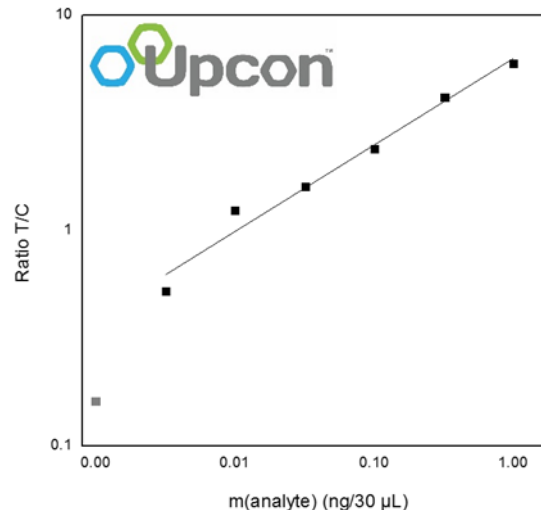
Analyte (ng / 30 $\mu$ L)	0	0.0032	0.01	0.032	0.1	0.32	1	3.2	10	32	100
Test line (T)	–	Not tested			–	–	(+)	+	++	++++	+++

# UPCON PARTICLES (luminescence scanning)

Analyte (ng / 30 $\mu$ L)	0	0.0032	0.01	0.032	0.1	0.32	1	3.2	10	32	100
Test / Control (Ratio T/C)	0.2	0.5	1.2	1.6	2.4	4.2	6.0	Not tested			

Testresults courtesy of Dr. Terhi Riuttamäki/Kaivogen Oy

**300-1000-fold**  
improvement in  
sensitivity





# What are we offering?

Instrumentation, software and up-converting nanoparticles for collaboration.

With the aim to develop diagnostic, environmental or other determination assays and kits using Upcon<sup>®</sup> technology



**Thank you for your attention**

**QUESTIONS ?**





## Contact information

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