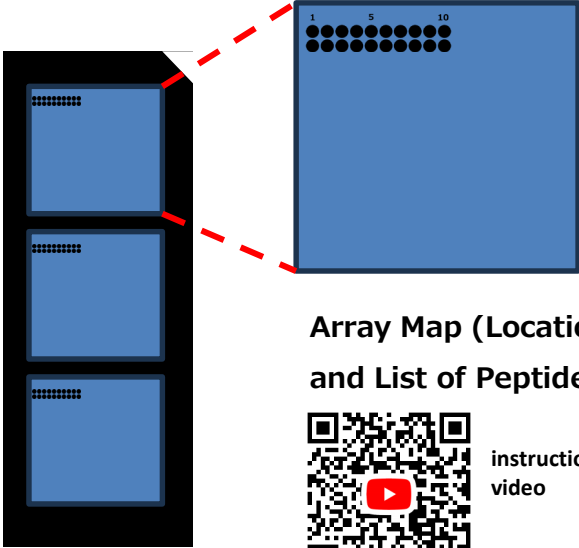


Specifications and User Manual : Oral healthcare rapid detection chip

P/N PTC-PDS-01 (Periodontal Disease, Saliva)

Immobilized Peptides	20 types of α -Helical peptides (Seq. α -TAMRA-G-XXXX-GC-NH ₂)
Substrate	3-block derivatized maleimide-coated amorphas carbon substrate
Immobilization	Immobilized via a covalent bond between the SH group of designed peptides with a polymethylene linker through a maleimide group
Spot diameter	ca 160 μ m
Pitch	ca 450 μ m
Array method	ca 0.14 pmol of peptide per spot was arrayed using a microarray spotter
Storage	Store the chip in the dedicated case, keep in a dark at 4°C



Array Map (Location)
and List of Peptides



instruction
video

Spot	No.	Seq. (XXXX)
1	202	FQQ FFK FFQ QFF KF
2	203	LQQ FFK FLQ QFF KF
3	204	LQQ LFK FLQ QLF KF
4	205	LQQ LLK FLQ QLL KF
5	206	FKK FFS FFK KFF SF
6	213	LSS LLK FLK KLL SF
7	214	FSS FFK FFS SFF KF
8	215	LSS FFK FLS SFF KF
9	237	LQQ LLR FLR RLL QF
10	279	LSS LLK VLK KLL SV
11	287	LEE LLR VLE ELL RV
12	319	AQQ AAK IAK KAA QI
13	332	AEE AIR IAE EAI RI
14	352	AKK FFR FAK KFF RF
15	354	AKK AAR FAK KAA RF
16	380	AKK AFS FAK KAF SF
17	400	AQQ FFR FAR RFF QF
18	449	ARR AVQ VAR RAV QV
19	452	AQQ AAR VAR RAA QV
20	498	IQQ IFR FIR RIF QF

Operation Manual

1. Preparation and Setup:

Place the substrate on a level, clean surface free of dust and debris.
Measurement of fluorescence intensity of the substrate, I_0 data using PBS before sample application.

2. Sample Application and Incubation (for 3 blocks)

*For each block, perform steps ① and ② in the following order.

① **Sample Application:** Accurately dispense 10 μ L of sample onto each block.

② **Cover Glass Placement:** Immediately and gently place the cover glass on top to ensure the dispensed sample spreads evenly across the entire block.

③ **Processing the Remaining Blocks:** Quickly repeat steps ① and ② for the remaining two blocks.

3. Incubation and Measurement

① **Sealing:** Immediately place the processed plate into the "Plate Reaction Vessel," close the cap securely, and seal it.

② **Incubation:** Leave the plate at room temperature in a dark place for 15 to 30 minutes.

③ **Fluorescence Measurement:** After incubation, remove the plate and perform the measurement using a fluorescence detector, I_1 .

Key Points for Accurate Measurement

Preventing air bubbles: When placing the cover glass, tilt it gently from the edge to avoid trapping air bubbles, which cause noise and/or signal loss during detection.

Avoid drying: Keep the time between dispensing the sample and placing the cover glass as short as possible.

Thorough Light Shielding: Important to store the chip in "dark" to prevent the fluorescent substance from fading. It is recommended that wrapping the container with aluminum foil or storing it in a light-shielding box.

Reference Related Products: Fluorescence Detection System PepTenCam, PTC-FD15 (CP06E); Other TESTING chip series s for research-use; ★ Gastric Cancer Risk (Pre-disease) Classification Chip: P/N PTC-GCM-01; ★ Cerebrospinal fluid Classification Chip (for multiple sclerosis and related diseases): P/N PTC-NDS-01 (Coming soon)

