SalivArray™ BioMarker Discovery Panel

User Guide

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SALIVARRAY™ BIOMARKER DISCOVERY PANEL

The **SalivArray™ Biomarker Discovery Panel** is a comprehensive salivary profiling tool designed to support biomarker research in inflammation, immune response, and related biological processes. This panel features an extensive set of clinically relevant biomarkers that enable researchers to screen and compare protein expression patterns directly from human saliva samples. Saliva, as a non-invasive biofluid, offers distinct advantages for biomarker discovery, including ease of collection, reduced patient discomfort, and the ability to reflect both host and microbial components associated with health and disease states.

The antibodies on the array are covalently immobilized on a high-quality glass surface coated with proprietary three-dimensional polymer materials to ensure high binding efficiency and specificity. Arrays are printed on standard-size microscope slides, with one complete array per slide, and use fluorescent detection compatible with microarray scanners that support 76 × 25 × 1 mm (3 in × 1 in × 1 mm) slides.

Each array set includes two identical slides, allowing parallel analysis of control and treated samples. To enhance data reliability, antibodies are printed in replicate.

Each array also incorporates internal controls, including Cy3-labeled positive markers to define array boundaries, beta-actin and GAPDH as positive controls, and BSA as a negative control. Empty spots contain no material and may be used to estimate background signal during data analysis.

Detailed antibody list, reactivity information, and array layout are available on the Full Moon BioSystems website under the Documentation section.

Material/Reagent	Size	Storage Condition
SalivaArray Biomarker Discovery Panel	2 slides/Pk	4°C (6 months)

SALIVARRAY™ REAGENT KIT

The SalivArray Reagent Kit for is designed for reliable processing of Full Moon BioSystems' SalivaArray Biomarker Discovery Panels and provides the core reagents required for protein extraction, biotinylation, conjugation, and detection. All reagents are optimized for use with Full Moon BioSystems' antibody array platform to ensure consistent performance.

The 2-reaction kit contains sufficient reagents to process two array slides, while the 20-reaction kit provides reagents for processing up to 20 slides.

Catalog No.	Description	Quantity
KAS02SA	SalivaArray Reagent Kit, 2 Reactions	2 Reactions
KAS20SA	SalivaArray Reagent Kit, 20 Reactions	20 Reactions

Kit Components

Material/Reagent	Quantity		Purpose	Storage Condition
	2-Rxn Kit	20-Rxn Kit		
Biotin Reagent	1 mg	5 x 1mg	Labeling	-20 °C
Blocking Reagent	60 mL	600 mL	Blocking	4 °C
Coupling Chamber	1	5	Coupling	RT
Coupling Reagent	12 mL	120 mL	Coupling	-20 °C
Detection Buffer	60 mL	600 mL	Detection	4 °C
DMF	200 uL	1 mL	Labeling	4 °C
Dry Milk	1.8g & 0.36g	18g & 3.6g	Coupling	4 °C
Extraction Buffer	1.5 mL	15 mL	Protein Extraction	4 °C
1x Labeling Buffer	2 mL	20 mL	Labeling	4 °C
10x Labeling Buffer	100 uL	1 mL	Labeling	4 °C
Lysis Beads	2 tubes	20 tubes	Protein Extraction	RT or 4 °C
Spin Columns	2 sets	20 sets	Buffer Exchange	RT
Stop Reagent	100 uL	1 mL	Labeling Reaction	4 °C
10X Wash Buffer	100 mL	500 mL x 2	Washing	4 °C

EXPERIMENTAL CONSIDERATIONS

- All reagents and materials are intended for research use only.
- Handle antibody array slides by the barcode-labeled area only. Do not touch the array surface.
- Exercise care throughout the assay, as variations in buffers, operators, pipetting technique, washing procedures, incubation time, or temperature may affect assay performance.
- Use only the reagents and materials specified in this user's guide. Substitution with reagents from other sources is not recommended.
- Do not allow arrays to dry during blocking, coupling, or washing steps, as this may result in elevated background signal.
- Wash arrays thoroughly with Wash Solution followed by water to ensure complete removal of residual reagents from the slide surface.
- The SalivArray Reagent Kit does not contain protease inhibitors. To minimize protein degradation, proceed promptly through the extraction and assay steps once sample preparation has begun. Protease inhibitors may be added if desired or if protein samples will be stored for one week or longer.
- Always wear gloves when handling reagents and array slides.

ADDITIONAL MATERIALS REQUIRED

- 1X PBS, pH=7.4
- Dye conjugated streptavidin
  - Cy3-Streptavidin is commonly used. It can be purchased from any vendors including GE Healthcare: PA43001; Invitrogen: S-32355 (Alexa Fluor 555 streptavidin); Sigma-Aldrich: S6402, and others.
  - Other dye labeled streptavidin can be used in place of Cy3-streptavidin provided that the dye is compatible with your array scanner.
- 50 mL conical tube with cap
- Centrifuge with 1.5 mL microtube rotor
- Milli-Q Grade Water or dd H_2O
- Orbital shaker
- Petri dishes, 100 x 15mm (9 cm in diameter)

- Slide drying (only one option is required)
  - By compressed air: compressed nitrogen/clean air supplied by a central line or from a cylinder. Do not use canned air duster or heat gun/blower.
  - By centrifugation: centrifuge with 50 mL swinging bucket rotor
- UV Spectrophotometer
- Vortexer
- Microarray scanner compatible with 3 x 1 inch (76 x 25 mm) slides

  If a compatible scanner is not available, finished array slides may be sent to Full Moon BioSystems for scanning. For details, visit www.fullmoonbio.com/services/array-scanning-image-analysis/.

REAGENT PREPARATION

REAGENTS TO WARM BEFORE USE

Blocking Reagent **Coupling Reagent** **Wash Buffer**	**Warm to 25-30°C in a water bath.**
Biotin **Detection Buffer** **DMF** **Dry Milk** **Labeling Buffer** **Stop Reagent**	**Warm to room temperature.**

2-RXN Kit (KAS02)

1	1X Wash Solution	Make 1:10 dilution. In a one-liter reagent bottle, add 100 mL of 10X Wash Buffer to 900 mL of dd H_2O. Shake to mix.
2	Blocking Solution	Add 1.8 g of Dry Milk to 60 mL of Blocking Reagent. Shake to mix. Be sure the milk powder is completely dissolved. **Use within one week.**
3	Coupling Solution	Add 0.36 g of Dry Milk to 12 mL of Coupling Reagent. Shake to mix. Be sure the milk powder is completely dissolved. **Use within one week.**

20-RXN Kit (KAS20)

1	1X Wash Solution	Make 1:10 dilution. For example, add 100 mL of 10X Wash Buffer to 900 mL of ddH_2O to make 1L of 1X Wash Solution. Shake to mix.
2	Blocking Solution	If you plan to perform 20 assays within one week, add 18 g of Dry Milk to 600 mL of Blocking Reagent. Be sure the milk powder is completely dissolved. For two assays, aliquot 60 mL of Blocking Reagent and add 1.8 g of Dry Milk. Shake to mix. **Use within one week.**
3	Coupling Solution	If you plan to perform 20 assays within one week, add 3.6 g of Dry Milk to 120 mL of Coupling Reagent. Be sure the milk powder is completely dissolved. For two assays, aliquot 12 mL of Coupling Reagent and add 0.36 g of Dry Milk. Shake to mix. **Use within one week.**

ASSAY PROTOCOL – SALIVA SAMPLE

IMPORTANT – PREPARE AND WARM REAGENTS BEFORE USE

A. Saliva Sample Collection and Preparation

This protocol prepares two saliva-derived samples: (1) clear saliva (cell-free), and (2) optional: saliva lysate obtained from the pellet. Both are suitable for antibody array analysis.

1. Instruct participants to rinse their mouth with water, fast for at least 2 hours, and avoid drinking for 20 minutes prior to collection.
2. Collect 1–2 mL of saliva by having participants spit saliva into a 50 mL conical tube.
3. Transfer saliva into a 1.5 mL microcentrifuge tube.
4. Freeze samples at −20 °C for ≥2 hours (overnight recommended).
5. Thaw samples at 4 °C.
6. Centrifuge at 20,817 × g for 60 minutes at 4 °C.
7. Carefully transfer the clear supernatant (Clear Saliva) to a new tube without disturbing the pellet.
8. Store the clarified saliva at 4 °C until Protein Quantification (Step C).

Stopping point:
At this stage, the clarified (cell-free) saliva is ready for downstream analysis. If only clarified saliva is required, samples may be stored at 4 °C (short term) or −80 °C (long term), and the protocol may be stopped here.

To prepare saliva lysate from the pellet, continue with Step 9.

9. Transfer the pellet to a new 1.5 mL microcentrifuge tube and wash with 1 mL cold 1× PBS.
10. Centrifuge at 20,817 × g for 5 minutes at room temperature and discard the supernatant.
11. Repeat the wash two additional times (total of three washes).
12. Add lysis beads and 100–200 µL extraction buffer to the washed pellet.
13. Vortex for 30 seconds every 10 minutes, for a total of 10 cycles, keeping samples on ice between vortexing intervals.
14. Centrifuge at 10,000 × g for 2 minutes at room temperature.
15. Transfer the entire sample without lysis beads to a new 1.5 mL microcentrifuge tube.

16. Centrifuge at 20,817 × g for 5 minutes at room temperature.
17. Transfer the clear supernatant (saliva lysate) to a new tube and discard the pellet.
18. Centrifuge the lysate at 20,817 × g for 60 minutes at 4 °C.
19. Transfer the clear supernatant to a new tube.
20. If the supernatant appears white or cloudy, repeat this centrifugation step until clear.
21. Proceed to Buffer Exchange (Step B).

B. Buffer Exchange/Lysate Purification

This step is performed only for saliva lysates derived from the pellet and is not required for clarified saliva samples.

1. Briefly spin the column in a mini-centrifuge to ensure the dry gel is settled to the bottom of the column.
2. Remove the screw cap and add 500 µL of 1× Labeling Buffer to reconstitute the gel.
3. Replace the cap and vortex vigorously for about 5 seconds. Remove air bubbles by sharply tapping the bottom of the column.
4. Allow the column to hydrate at room temperature for 2–3 hours before use. Note: If the column was stored at 4°C, allow the column to reach to room temperature before hydration.
5. After hydration, loosen the screw cap and then break off the bottom stopper.
6. Place the column into a wash tube and centrifuge at 1,500 x g for 1 minute.
7. Discard the flow-through fluid in the wash tube. Return the column to its wash tube.
8. Add 300 µL of 1x Labeling Buffer to the column. Centrifuge at 1,500 x g for 1 minute.
9. Discard the flow-through fluid in the wash tube. Place the column into a collection tube.
   Important: Do not allow the gel bed to dry excessively. Proceed with sample loading within the next few minutes.
   Note: The sample volume capacity of each spin column is 100 µL.
10. Transfer up to 100 µL of saliva lysate (from Step A) by carefully dispensing the sample directly onto the center of the gel bed without disturbing the gel surface, avoiding contact with the column walls.
11. Centrifuge the column in its collection tube at 1,500 x g for 2 minutes.
12. Collect the purified protein from the bottom of the collection tube. Discard the spin column.
13. Proceed immediately to the next step.

C. Protein Quantification and QC

Determine protein concentration for both clear saliva (from Step A8) and saliva lysates (from Step B) using UV absorbance spectroscopy (A280), BCA assay, Bradford assay, or other quantification methods.

- **UV Absorbance A280**: Measure sample absorbance (OD). Use 1x Labeling Buffer or water as blank.
  Note: Record only the absorbance value (OD)**.** The OD value will be used directly in Step D to determine sample input for labeling and coupling. Do not convert OD to protein concentration (mg/mL). **Many A280 methods assume** 1 OD = 1 mg/mL**,** which is not accurate for lysate samples due to interference from non-protein components (e.g., nucleic acids, insoluble material).
- **BCA and Bradford assays**: either assay can be used to determine protein concentration of saliva lysates.

D. Protein Labeling – Biotinylation of Protein Samples

1. Biotin Preparation

a. Briefly centrifuge Biotin Reagent before use.
b. Add 100 µL of DMF (N,N-Dimethylformamide) to 1 mg of Biotin Reagent. (Final concentration will be 10 µg/µl.) Briefly vortex and spin down. Label this solution as Biotin/DMF.

2. Determine sample amount for labeling

Determine the amount and volume of sample needed for the protein/antibody coupling reaction (Step F). OD values used below refer to A280 absorbance measurements obtained in Step C.

a. Clear Saliva

Note: For most clear saliva samples, the recommended maximum OD per reaction is 150 OD.

- All samples must have the same max OD to allow comparison between arrays.
- Use the OD value (protein concentration) obtained from Step C to calculate the volume of saliva sample needed.
- **Important**: If the clear saliva concentration is < 2.22 OD, a single labeling reaction cannot reach 150 OD; multiple labeling reactions are required. Example: If the clear saliva concentration is 1 OD, the maximum OD per reaction is 67.6 OD, perform 3 reactions to reach the 150 OD required for coupling.

i) Aliquot and transfer the calculated amount of saliva sample (see following table) to a new tube.
ii) Add 10× and 1× Labeling Buffer as indicated in the table to achieve a final 1× labeling condition and total volume of 75 µL.

The table below shows example calculations for common clear saliva OD values. Use it to determine sample and labeling buffer volumes per labeling reaction and the number of reactions required to reach ⩾150 OD total for coupling.

If your sample OD is not listed, calculate volumes using the formulas provided. When more than one labeling reaction is required, perform reactions separately and pool the biotinylated samples prior to the coupling step.

Clear Saliva Conc. (CSOD)	Max OD per Reaction (MODR)	Sample Volume per Reaction (µL) (SV)	10X Labeling Buffer Vol (µL) (10LBV)	1X Labeling Buffer Vol. (µL) (1LBV)	# of Reactions Needed (≥150OD) (#RXN)
Value from Step C	MODR = 67.6⊗ × CSOD	SV = MODR ÷ CSOD	10LBV = SV × 0.11φ	1LBV=75 µL+ –SV–10LBV	MODR x #RXN ≥ 150 OD
0.5	33.8	67.6	7.4	0	5
0.75	50.7	67.6	7.4	0	3
1	67.6	67.6	7.4	0	3
1.25	84.5	67.6	7.4	0	2
1.5	101.4	67.6	7.4	0	2
1.75	118.3	67.6	7.4	0	2
2	135.2	67.6	7.4	0	2
2.25	150*	66.7	7.3	1.0	1
2.5	150*	60.0	6.6	8.4	1
3	150*	50.0	5.5	19.5	1

IMPORTANT NOTES:

⊗ 67.6 is the maximum sample volume allowed to maintain 1x labeling conditions.

φ 0.11 is a dilution factor used to calculate 10x Labeling Buffer volume.

+75 µL is the fixed total volume for sample pus Labeling Buffer.

* If the calculated MODR is greater than 150 OD, use 150 OD.

b. ***Saliva Lysates***

Note: For most saliva lysates, 150 OD may be used for each reaction. Use 1x Labeling Buffer only (no 10× buffer required).

- Use the OD value (or protein concentration) from Step C to determine the volume of lysate sample needed.
- Example: If the lysate concentration is 5 OD, then the volume of lysate needed will be 30 µL (150 OD/5 OD = 30 µL).

i) Aliquot and transfer the calculated amount to a new tube. (This aliquot should be no more than 50 µL.)

ii) Add 1x Labeling Buffer to the sample to bring the total volume to 75 µL.

3. Add 3 µL of Biotin/DMF solution to each labeling reaction. Incubate the mixture at room temperature for 1 – 2 hours. Vortex every 10 minutes. Note: Remaining Biotin/DMF solution may be stored at -20°C for future use.
4. Add 35 µL of Stop Reagent to each reaction. Mix by vortexing and quickly spin down. Incubate for 30 minutes at room temperature with mixing.
5. Proceed immediately to the next step, or store the biotinylated sample at -80°C for future use.

E. Blocking

Pre-blocking preparation: Remove the antibody arrays from refrigeration but do not open the pouch. Allow the packaged arrays to warm to room temperature for 60 minutes, then remove the pouch and let the slides dry for 30 minutes or longer. Adjust warm-up and drying time based on ambient temperature and humidity.

High humidity locations (relative humidity >50%): warm the packaged arrays in a 30°C oven for 60 minutes, remove the pouch, and continue drying in the oven for an additional 10 minutes.

Important: Before starting Step 1, ensure that the Blocking Solution (See "Reagent Preparation") is at room temperature and that dry milk is fully dissolved.

1. Add 30 mL of Blocking Solution to a 100 x 15 mm Petri dish.
2. Submerge one slide in the solution with the barcode label facing up.
3. Incubate on an orbital shaker rotating at 55 rpm for 30 to 45 minutes at room temperature.
4. Rinse the slide **extensively** with Milli-Q grade or DI water:
   a. Place the slide in a 50-ml conical tube and fill with 45 mL of water. Close the cap. Shake by hand for 10 seconds. Discard the water.
   b. Repeat 10 times.
      Important: Complete removal of Blocking Solution is essential for achieving low background. After the final rinse, the thin layer of water on the slide surface should appear uniformly smooth. If the surface looks spotty, repeat the rinse steps.
5. Shake off excessive water on the slide surface. Proceed immediately to the next step.

   Note: Do not allow the slide to dry. If you are not ready to begin the coupling step, store the slide submerged in clean water in a conical tube.

F. Coupling

Note: The Protein Coupling Mix (Step F.1) may be prepared in advance so that coupling can begin immediately after blocking.

Important: Before starting, ensure that the Coupling Solution (See "Reagent Preparation") is at room temperature and that dry milk is fully dissolved.

1. In a new tube, combine 6 mL of Coupling Solution with the appropriate volume of biotinylated sample from Step D. Vortex briefly to mix. Label this tube "Protein Coupling Mix."
   The recommended loading amount is 150 OD of biotinylated samples per slide. If multiple labeling reactions were performed and pooled, add the volume required to achieve 150 OD total.
   If biotinylated sample concentration is <150 OD per reaction, calculate the volume needed as follows:

Biotinylated sample volume needed (µL) = 113 µL ÷ MODR × 150 OD

Note: 113 µL is the total labeling reaction volume (sample + 10× Labeling Buffer + 1× Labeling Buffer + DMF + Stop Reagent).

2. Place the slide in Well 1 (or any clean well) of the Coupling Chamber.
3. Slowly pour all 6 mL of Protein Coupling Mix over the slide. ensuring the slide is completely submerged. Cover the Coupling Chamber with its lid.
4. Incubate on an orbital shaker rotating at 35 rpm for 1 – 2 hours at room temperature.
5. Transfer the slide to a 100x15 mm Petri dish with 30 mL of 1X Wash Solution.
   Shake at 55 rpm for 10 minutes at room temperature. Discard the wash solution once shaking is completed.
6. Add 30 mL of fresh 1X Wash Solution to the same Petri dish. Shake at 55 rpm for 10 minutes at room temperature. Discard the wash solution. Repeat this step once more (total three washes).
7. Rinse the slide extensively with Milli-Q grade or DI water:
   a. Place the slide in a 50-mL conical tube and fill with 45 mL of water. Close the cap. Shake by hand for 10 seconds. Discard the water.
   b. Repeat 10 times.

   Important: Thorough rinsing is critical to completely remove Coupling Solution. After the final rinse, the thin water layer on the slide surface should appear **uniform and smooth**. If the surface looks spotty, repeat Step 7.
8. Shake off excessive water on the slide and proceed to the next step immediately.
   Note: Do not allow the slide to dry. If you are not ready to begin the detection step, store the slide submerged in clean water in a conical tube.

G. Detection

1. Prepare Cy3-streptavidin detection solution: add 60 µL of Cy3-streptavidin (0.5 mg/mL) to 60 mL of Detection Buffer.

   Note: If the Cy3-streptavidin is in dry form, add biological grade ultrapure water to make 0.5 mg/mL.
2. Pour 30 mL of detection solution into a 100 x 15 mm Petri dish.
3. Submerge the slide in the detection solution. Incubate on an orbital shaker rotating at 35 rpm for 20 minutes at room temperature, protected from light (cover with aluminum foil).
4. Transfer the slide to a new 100 x 15 mm Petri dish containing 30 mL of 1X Wash Solution. Shake at 55 rpm for 10 minutes at room temperature. Discard the wash solution once shaking is completed.
5. Repeat the wash step twice more with fresh 30 mL 1× Wash Solution each time, shaking at 55 rpm for 10 minutes per wash.
6. Rinse the slide extensively with Milli-Q grade or DI water:

a. Place the slide in a 50-ml conical tube and fill with 45 mL of water. Close the cap. Shake for 10 seconds, and discard the water.

b. Repeat 10 times.

Important: Complete removal of Detection Solution ensures uniform, low-background signal. After the last rinse, the water layer should appear smooth and uniform; repeat rinsing if spotty.

7. Shake off excess water from the slide.
8. Dry the slide immediately:
   a. Compressed nitrogen or air: use cylinder/nitrogen line (≤40 psi), hold nozzle ~1 inch from slide at 30° angle, and push water off front and back surfaces. Do not use canned air.
   b. Centrifugation: place slide uncapped in a 50-mL conical tube, centrifuge at 1,000 × g for 5 minutes.
9. The slide is now ready for scanning.

ASSAY PROTOCOL – OTHER SAMPLE TYPES

This section applies to **non-saliva samples only**. For processing cell lysates, tissue lysates, serum, plasma, or culture supernatants, follow the procedures described in the Antibody Array User's Guide.

Sample preparation requirements, including lysis buffer composition, protein input amounts, and handling conditions, differ from those used for saliva samples. Refer to the User's Guide for:

- Recommended lysis and extraction methods
- Protein quantification guidelines
- Input requirements for labeling and coupling
- Sample-specific considerations

Scan the QR code to download Antibody Array User's Guide:

ARRAY SCANNING

Microarray scanners that are compatible with 76mm x 25mm (3in x 1in) microscope slides may be used to scan Full Moon BioSystems' antibody arrays. Recommended Scanning Resolution: 10um or higher (10um, 5um, etc.)

Commonly Used Compatible Array Imaging Systems

Manufacturer	Product Name	Required Accessory
Agilent Technologies	DNA Microarray Scanner SureScan Microarray Scanner	
Alpha Innotech	AlphaScan™ Microarray Scanner NovaRay™ Detection Platform	
Applied Precision	arrayWoRx® E Biochip Reader	
Aurora Photonics	PortArray 5000™	
Azure Biosystems	Sapphire and Sapphire Biomolecular Imager	
Biomedical Photometrics	The DNAscope™ HR	
Bio-Rad	VersArray ChipReader™	
GE Healthcare, formerly Amersham Biosciences	Typhoon™ 8610 and newer	Microarray Slide Holder Kit
Genewave	AmpliReader™ 4600 Microarray Reader	
InDevr	Vidia™ Microarray Imaging System	
INNOPSYS	InnoScan® Microarray Scanner	
Miltenyi Imaging GmbH	SensoSpot® Fluorescence Microarray Analyzer	4-slides Holder Adapter
Molecular Devices, formerly Axon Instruments	GenePix® Microarray Scanner All models	
PerkinsElmer, formerly Packard Bioscience	ProScanArray® HT Microarray Scanner ProScanArray® Microarray Scanner ScanArray® GX Microarray Scanner ScanArray® GX PLUS Microarray Scanner	
Tecan	LS Reloaded™ Versatile Scanner	

	PowerScanner™ Microarray scanner
Vidar Systems	Revolution™ 4200 Microarray Scanner

Please note this is not an exhaustive list. In general, most gene microarray scanners will be compatible as long as they have a Cy3 (green) channel and a pixel resolution of <20 µm.

Array Scanning Service

Our Antibody Array Scanning Service is available free of charge for customers who purchase our antibody arrays but have no access to a microarray scanner. With this service, you will receive the original raw image files in TIFF format by email. The images may be analyzed with compatible image quantification software.

To use this service, the antibody array assay must be performed using Cy3 or Cy5-streptavidin or equivalent. Please refer to the wavelength table below when choosing alternative dyes.

	Cy3	Cy5
Excitation wavelength	~550 nm	~650 nm
Emission wavelength	~570 nm	~670 nm

To prepare slides for shipping, place them back into the slide holder and cover the holder with aluminum foil to protect the slides from light. Ship the package at room temperature and include the array information along with your contact details (name, organization, phone number, and email address). Ship your package to:

Attn: Array Scanning Service
Full Moon BioSystems, Inc.
754 North Pastoria Avenue
Sunnyvale, CA 94085, United States
Phone: 408-737-2875 | Email: support@fullmoonbio.com

IMAGE ANALYSIS

Antibody array images may be analyzed using a variety of image quantification software, including tools provided by scanner manufacturers (e.g., GenePix Pro, Agilent Feature Extraction), third-party software, or open-source programs such as ImageJ.

Consumer-grade picture viewing software (e.g., Microsoft Picture Manager) is not suitable for viewing or analyzing microarray images.

GenePix Array List (GAL) File

A GAL file defines the size and position of blocks, the layout of printed features, and the identifiers associated with each feature. When loaded into a compatible analysis software, the GAL file automatically generates grids for spot quantification.

GAL files for each array are available on the Full Moon BioSystems website under the Support section. Parameters in these files are optimized for images scanned at 10 µm resolution in portrait orientation. Images scanned at different resolutions require parameter adjustments, and images acquired in other orientations must be rotated before using the GAL file. A rotation guide for Agilent scanners is available on our website.

If your analysis software does not support GAL files, grid files must be created manually using the array parameters and the array map. Array parameters are available in the User's Guide section of the website, and array maps can be found under the Documentation tab of each array's webpage. Refer to your software's user guide for instructions on generating grid files.

Image Analysis Service

An optional Array Image Analysis Service is available for users who have obtained array images through the Array Scanning Service but are unable to analyze the data themselves. Results are delivered by email within 2–7 business days. For more information, visit: https://www.fullmoonbio.com/services/array-image-analysis/

CONTACT SUPPORT

For questions related to antibody arrays, please contact our technical support team:

Phone: 408.737.2875 Email: support@fullmoonbio.com