Section 1 - Identification

Product Name:	Antibody Array Assay Kit
Product Number:	KAS02, KAS20
Recommended Use:	Laboratory research reagent for antibody array assays. Research use only (RUO). Not for use in humans or diagnostic procedures.
Manufacturer:	Full Moon BioSystems, Inc.
Address:	754 N. Pastoria Ave, Sunnyvale, CA 94085, USA
Technical Phone:	408.737.2875
Website:	www.fullmoonbio.com

Section 2 - Hazards Identification

GHS Classification

Mixture Classification:

This kit contains multiple components. The following hazardous ingredients are present at <1% concentration:

- **Acute Toxicity, Oral - Category 4** (Triton X-100)
- **Serious Eye Damage - Category 1** (Triton X-100)
- **Skin Irritation - Category 2** (SDS, Triton X-100, Tween 20)
- **Eye Irritation - Category 2A** (SDS, Tween 20)

GHS Label Elements

Signal Word: WARNING

Hazard Pictograms:

Hazard Statements:

- H302: Harmful if swallowed
- H315: Causes skin irritation
- H318: Causes serious eye damage (Triton X-100 component)
- H319: Causes serious eye irritation (SDS, Tween 20 components)
- H335: May cause respiratory irritation

Precautionary Statements:

Prevention:

- P264: Wash hands and exposed skin thoroughly after handling
- P280: Wear protective gloves/protective clothing/eye protection/face protection
- P261: Avoid breathing mist/vapors/spray
- P270: Do not eat, drink or smoke when using this product

Response:

- P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P302+P352: IF ON SKIN: Wash with plenty of water
- P332+P313: If skin irritation occurs: Get medical advice/attention
- P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing

Disposal:

- P501: Dispose of contents/container in accordance with local/regional/national/international regulations

Other Hazards
HNOC (Hazards Not Otherwise Classified):

- Slipping hazard if spilled
- For research use only - not intended for human use

Section 3 - Hazards Identification

Mixture Components

This kit contains the following components: Blocking Reagent, Coupling Reagent, Biotin, Detection Buffer, Extraction Buffer, Labeling Buffer, Stop Reagent, Wash Buffer

Hazardous Ingredients (Concentration <1% each)

Chemical name	CAS No.	Concentration range	Classification
Sodium dodecyl sulfate (SDS)	151-21-3	< 1 %	Skin Irrit. 2, H315; Eye Dam. 1, H318; STOT SE 3, H335
Octoxynol-9 (Triton X-100)	9002-93-1	< 1 %	Skin Irrit. 2, H315; Eye Dam. 1, H318; Aquatic Chronic 2, H411
Polysorbate 20 (Tween 20)	9005-64-5	< 1 %	Skin Irrit. 2, H315; Eye Irrit. 2A, H319
Biotin (separate vial)	58-85-5	≥ 98 %	Repr. 2, H361fd

Kit Component Locations:

- SDS (Sodium Dodecyl Sulfate): Detection Buffer, Extraction Buffer, Wash Buffer
- Triton X-100: Extraction Buffer
- Tween 20: Detection Buffer, Wash Buffer
- Biotin: Supplied as separate 1mg component

Note: According to OSHA HCS 29 CFR 1910.1200, ingredients present at <1% concentration may not trigger classification for the mixture, but hazards are disclosed for user awareness.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.
Ingestion: If victim is conscious and alert, wash out month with water. Never give anything by mouth to an unconscious person. Get medical aid if irritation or symptoms occur.
Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Section 5 - Fire Fighting Measures

Flash Point: Not available.
Autoignition Temperature: Not available.

Explosion Limits: Not available.
Extinguishing Media: Use water spray, dry chemical, or carbon dioxide.
Firefight: Wear protective clothing and self-contained breathing apparatus to prevent contact with skin and eyes.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Remove all sources of ignition. Use a spark-proof tool. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.
Storage: Store in a tightly closed container away from incompatible substances. Keep refrigerated. (Store below 2-8°C).

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Local exhaust may be necessary to control concentrations to acceptable levels.
Personal Protective Equipment
Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirators if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Appearance: Various (liquids and white solid)
Odor: Slight or none
pH: ~7 (buffered solutions)
Melting point: Biotin 231–233 °C
Solubility: Most components fully soluble in water

Section 10 - Stability and Reactivity

Reactivity: Stable under recommended storage conditions
Chemical Stability: Stable.
Conditions to Avoid: High temperatures, incompatible materials.

Incompatibilities with Other Materials: Strong acids and bases, strong oxidizers.
Hazardous Decomposition Products: carbon monoxide, carbon dioxide.
Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

Acute toxicity: Low (contains < 1 % SDS, Triton X-100, Tween 20)
Skin corrosion/irritation: Category 2 (SDS, Triton X-100)
Serious eye damage/irritation: Category 2 (SDS, Triton X-100, Tween 20)
Reproductive toxicity: Biotin present in trace amounts – Category 2 (based on animal studies at high doses)
Likely routes of exposure: Skin, eyes, inhalation of dust (Biotin)

Section 12 - Ecological Information

Ecotoxicity: No data available. No information available.
Environmental: No information reported.
Physical: No information available.
Other: None.

Section 13 - Disposal Considerations

Dispose of as chemical waste in accordance with federal, state, and local regulations

Section 14 - Transport Information

DOT (US), IMDG, IATA: Not regulated for transport (non-dangerous goods).

Section 15 - Regulatory Information

US Federal: SARA 302/304/311/312/313 – No reportable components
California Prop 65 – Not listed
TSCA – All components listed or exempt

Section 16 – Other Information

This product is not intended for use in humans. To the best of our knowledge, this document is accurate. It is intended to serve as a guide for safe use of this product in a laboratory setting by experienced personnel. The burden of safe use of this material rests entirely with the user. The above information is believed to be accurate but is not necessarily all-inclusive and shall be used only as a guide. Full Moon BioSystems, Inc., shall not be held liable for any damage resulting from the handling of or from contact with the above product.