

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier:

Product Name: AMMS®CIK Cell Expansion Reagent & Medium Kit

Product Numbers: AS-15

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Relevant identified uses: Used for the inoculation of CIK primary cells and the induction and amplification of CIK cell activation.

Not for any animal, human or therapeutic use.

Uses advice against: No additional information available

1.3 Details of the supplier of the Safety Data Sheet:

Beijing T&L Biotechnology Co., Ltd.

Zip code: 102600

Tel: 010-56946635

Fax: 010-68640843

E-mail: service@seafrom.cn

website: <https://www.seafrom.com/>

1.4 Emergency telephone number:

Emergency number: 010-56946635

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

Classification according to Regulation (EC) 1272/2008, the product is not classified as hazardous

2.2 Label elements:

Label elements according to Regulation (EC) 1272/2008, the product does not need to be labelled

2.3 Other hazards:

Not /hazardous

CAUTION!

Handle as if capable of transmitting infectious agents. When handling, follow appropriate guidelines in accordance with good laboratory hygiene and safety protocols. Appropriate clothing should be worn to limit exposure to eyes, skin, and mucous membranes. Wash hands after use.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances: Organic compound (Human-derived material)

Composition:

CIK reagent A: M04063, mannitol, PBS

CIK reagent B: M01043, M01047, M04065, M04073, mannitol, PBS

Recombinant human IL-2 protein (efficient)

AMMS ® CIK serum-free medium: M04166, L-Ascorbicacid2-PhosphatesguimagnesiumSult , Zinc sulfate , M04168, M01052, transferrin (bovine), insulin injection, Glutathione monosodium , Ammonium Metavanadate , ManganousChloride , SodiumSelenite, Ethanolamine , Sodium Pyruvate , HEPES, glutamine

CIK Reagent A, CIK Reagent B, and AMMS ® The preparation water for CIK serum free culture medium is sterile injection water, and the pH value is adjusted through hydrochloric acid or sodium hydroxide solution.

Product Description:

(Instructions for use) Inoculation of CIK primary cells (Day 0):

1. Collect blood and separate PBMC, inactivate plasma for backup.
2. Inoculate cells (inoculation density 1×10^6 /mL) into a culture flask using serum-free medium, with a final volume of 30-50mL. Add CIK reagent A and 1.5-5mL of inactivated plasma (5% of final volume).
3. Place the cultivation bottle into a CO₂ incubator for cultivation.

CIK cell activation induced amplification:

On the first day, CIK reagent B was added and placed in a CO₂ incubator for further cultivation.

On the 4th day, approximately 100mL of fluid was replenished, and 5-10mL of inactivated blood plasma was added. The fluid could be replenished according to the cell density, and the cell density remained within the range of $0.5-1 \times 10^6$ /mL after fluid replacement. (Total volume 150mL)

On the 6th day, add approximately 10-20mL of inactivated blood plasma, transfer the cell suspension evenly to the culture bag, and replenish the solution. (Total volume 450mL)

On the 8th day, replenish 550mL of fluid. Bacterial testing. (Total volume 1000mL)

On the 11th day, evenly distribute the cell suspension into 2 culture bags and replenish the solution with equal volume. (Total volume 2000mL)

On the 13th day, bacterial, endotoxin, and mycoplasma tests were conducted.

On the 14th or 15th day, cells were harvested.

CAS Number: None

EC Number: None

Annex I Index Number: None

3.2 Mixtures:

Information not required

SECTION 4: FIRST AID MEASURES**4.1 Description of first aid measures:**

General Information: Consult a doctor in case of discomfort with this Security Data Sheet.

Skin Contact: Rinse with soap and plenty of water after each contact.

If symptoms arise, consult a physician.

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at Least 15 minutes. Assure adequate flushing by separating the eyelids

with fingers. If symptoms occur, consult a physician.

Ingestion:

Never give anything by mouth to an unconscious person.

Wash out mouth with water. Do not induce vomiting without medical advice. If swallowed consult a physician.

Inhalation:

Move to fresh air. If symptoms persist, consult a physician.

If not breathing, give artificial respiration.

4.2 Most important symptoms and effects, both acute and delayed:

Acute and delayed effects are indicated in section 11.

4.3 Indication of any immediate medical attention and special treatment needed:

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable Extinguishing Media: use extinguishing media appropriate for surrounding fire.

5.2 Special hazards arising from the substance or mixture:

Fire hazard: Not flammable.

Explosion hazard: Product is not explosive.

Reactivity: Stable at ambient temperature and under normal conditions of use.

5.3 Advice for fire fighters:

Precautionary measures fire: Exercise caution when fighting any chemical fire.

Firefighting instructions: Use water spray or fog for cooling exposed containers.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: Use personal protective equipment. Avoid contact with eyes and skin.

For emergency responders: Use personal protective equipment. Avoid contact with eyes and skin.

6.2 Environmental precautions:

This product is not classified as dangerous to the environment. Keep product away from drains, surface and underground water.

6.3 Methods and material for containment and cleaning up:

Methods and material for containment: Soak up with inert absorbent material.

After clean-up, disinfect affected area.

Deposit in appropriate containers for removal and disposal.

Methods and material for cleaning up: Soak up with inert absorbent material.

After clean-up, disinfect affected area.

Deposit in appropriate containers for removal and disposal.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

Recommendations shall be specified to:

- Avoid contact with skin, eyes and clothing.
- Wear personal protective equipment.
- Keep away from heat. Keep away from sources of ignition.
- Ground all equipment containing material.

Advice on general occupational hygiene shall be provided:

- Avoid contact with skin, eyes and clothing.
- Wear personal protective equipment.
- Ground all equipment containing material.
- Remove contaminated, saturated clothing immediately.
- Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities:

- Storage conditions:
- Keep container tightly closed. Keep container in a dry, cool, Well-ventilated area.
 - Store in the dark at (2-8) °C.

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the work environment.
There are no environmental limits for the substances contained in the product.

8.2 Exposure controls: None

Appropriate engineering controls: In particular, ensure adequate ventilation when using in confined areas, or use in fume hoods when permitted. Ensure that all engineering measures described in SDS section 7 are in place and that the laboratory is equipped with a safety shower and eyewash table.

Information on System Design: None

Personal Protective Equipment:

Respiratory Protection: If the risk assessment indicates that it is necessary, use a suitable respirator.

Hand Protection: Use protective gloves.

Eye Protection: Select appropriate goggles.

Skin Protection: Use appropriate chemical resistant gloves (the minimum requirement is BS EN 374:2003). Wash and dry hands before use, and check the integrity of gloves.

Body Protection: wear appropriate protective clothing.

Thermal hazards: None.

Environmental exposure controls: None.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance: CIK reagent A and CIK reagent B are freeze-dried powder, AMMS® CIK serum free medium is liquid.

Odour: Non-applicable

Odour threshold: Non-applicable

pH: The pH of CIK reagent A and CIK reagent B is 7.4, AMMS® The pH of CIK serum free medium is 7.0-7.4

Melting point: Non-applicable

Initial boiling point: Non-applicable

Boiling range: Non-applicable

Flash point: Non-applicable

Evaporation rate: Non-applicable

Flammability (solid, gas): Non-applicable

Upper flammability limits: Non-applicable

Lower flammability limits: Non-applicable

Vapour pressure: Non-applicable

Vapour density: Non-applicable

Relative density: Non-applicable

Solubility: Soluble

Auto-ignition temperature: Non-applicable

Decomposition temperature: Non-applicable

Viscosity: Non-applicable

Explosive properties: Non-applicable

Oxidising properties: Non-applicable

9.2 Other information:

Thermal decomposition: Non-applicable

Vapour density: Non-applicable

Evaporation rate: Non-applicable

Surface tension at 20°C: Non-applicable

Refraction index: Non-applicable

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity: Stable under recommended transportation or storage conditions.

10.2 Chemical stability: Stable under recommended storage conditions.

10.3 Possibility of hazardous reaction: None

10.4 Conditions to avoid: No dangerous reaction known under conditions of normal use.

10.5 Incompatible materials: Strong acid / base, strong oxidizing / reducing agent.

10.6 Hazardous decomposition: Strong acid / base, strong oxidizing / reducing agent.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

Mixtures

Acute toxicity:

Skin corrosion/irritation: May cause skin irritation in susceptible person

Serious eye damage/irritation: May cause eye irritation in susceptible person

Respiratory tract or skin sensitization: may cause respiratory tract or skin allergy to allergic people

Inhalation: The throat may be irritated and the chest feels tight

Ingestion: May irritate throat

Subacute/Chronic toxicity:

Carcinogenicity: Not classified

Mutagenicity: Not classified

Teratogenicity: Not classified

Narcotic effects: Not classified

Reproductive effects: Not classified

Developmental effects: Not classified

Ingredients:

Acute toxicity: Not classified

Subacute/Chronic toxicity: Not classified

Other adverse effects: Toxicological properties have not been thoroughly investigated.

Target organ effects: No known effects under normal use conditions

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity: No information available

12.2 Persistence and degradability: The product is biodegradable.

12.3 Bioaccumulative potential: Does not bioaccumulate.

12.4 Mobility in soil: Does not bioaccumulate.

12.5 Results of PBT and vPvB assessment:

Persistent, bioaccumulative and toxic substances (PBT-substances):None.

Very persistent and very bioaccumulative substances (vPvB-substances):None.

12.6 Other adverse effects: None.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods: Dispose of in accordance with local, regional, national, provincial, territorial and international regulations.

Product:

Transfer to a suitable container and arrange for collection by a specialized disposal company according to relevant regulations.

Contaminated packaging:

Dispose of hazardous or toxic waste in regulated landfills or other methods according to relevant regulations.

SECTION 14: TRANSPORT INFORMATION

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

- 14.1 UN number:** Not classified as dangerous in the meaning of transport regulations
- 14.2 UN proper shipping name:** Not classified as dangerous in the meaning of transport regulations
- 14.3 Transport hazard class(es):** Not classified as dangerous in the meaning of transport regulations
- 14.4 Packing group:** Non-applicable
- 14.5 Environmental hazards:** Non-applicable
- 14.6 Special precautions for user:** Non-applicable
- 14.7 Transport in bulk according to AnnexII of MARPOL73/78 and the IBC Code:** Non-applicable

SECTION 15: REGULATORY INFORMATION

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**
 - No known hazards.
 - No REACH Annex XVII restrictions.
 - Contains no REACH candidate substance.
- 15.2 Chemical safety assessment:** No chemical safety assessment has been carried out

SECTION 16: OTHER INFORMATION

Research Use Only (RUO). Not for any animal, human or therapeutic use. The above information is believed to be correct to the best of our knowledge but does not purport to be all-inclusive and shall be used only as a guide. It does not represent any guarantee of the properties of the product. All materials and mixtures may present unknown hazards and should be used with caution. Beijing T&L Biological Technology Co.,Ltd. shall not be held liable for any direct, indirect, consequential or incidental damages resulting from handling or from contact with the above product.