

Animal Tissue and Cell RNA Extraction Kit

SECTION 1: Identification

Product identifier: Animal Tissue and Cell RNA Extraction Kit.

MediRes catalogue number: G3640-50T

Pack size: 50 reactions.

Recommended use: Spin-column extraction of total RNA from animal tissue and cells.

Restrictions on use: For research use only. Not for diagnostic, therapeutic, food, household or cosmetic use.

Supplier: MediRes Corp., 109 Elm Street, Sudbury, ON P3C 1T4, Canada. Telephone: +1 705-222-2847. Email: sales@medi-res.com.

Emergency telephone: +1 705-222-2847. For exposure or poisoning, contact a poison control centre or emergency medical service.

SECTION 2: Hazards identification

Classification: Acute toxicity (dermal), Category 4; skin corrosion, Category 1 (subcategory not available); serious eye damage, Category 1. Aquatic acute hazard, Category 3 (supplemental GHS environmental classification).

Hazard communication basis: Hazards describe the hazardous kit reagents, not every vial. The supplier reports both irritation and severe skin/eye injury; the more severe corrosion information in its toxicology section is used for hazard communication. Component-specific category assignments are not available.

Signal word: DANGER

Hazard pictograms



GHS05 Corrosion | GHS07 Exclamation mark

Code	Hazard statement
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H402	Harmful to aquatic life.

Other hazards: Guanidine thiocyanate-containing reagents and waste must not be mixed with bleach, acids or oxidizers; toxic gases may be released. Avoid enzyme aerosols. Proteinase K has a respiratory sensitization hazard; sensitization data for the supplied enzyme mixture are not available.

Prevention: P260 - Do not breathe dust, vapour, mist or spray. P264 - Wash thoroughly after handling. P280 - Wear protective gloves, protective clothing and eye protection. P273 - Avoid release to the environment.

Response: P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 - IF ON SKIN (or hair): Remove contaminated clothing immediately. Rinse skin with water or shower. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes; remove contact lenses if present and easy to do; continue rinsing. P310 - Immediately call a POISON CENTRE or doctor. P363 - Wash contaminated clothing before reuse. P304+P340 - IF INHALED: Remove to fresh air and keep comfortable for breathing.

Storage and disposal: P405 - Store locked up. P501 - Dispose of contents and container through an approved waste service in accordance with applicable regulations.

Unknown acute toxicity: Percentage of ingredients with unknown acute toxicity is not available.

SECTION 3: Composition and information on ingredients

Separate reagent mixtures. Percentages are supplier-reported upper limits for each named component, not percentages of the whole kit. Percentage basis (w/w, w/v or v/v) is not specified. Remaining ingredients are not identified individually; the supplier describes them as non-hazardous at their stated concentrations.

Component	Chemical name	CAS No.	Content
G3640-1	Guanidine thiocyanate	593-84-0	<40%
G3640-1	Sodium acetate trihydrate	6131-90-4	<20%
G3640-2	Guanidine thiocyanate	593-84-0	<60%
G3640-2	Sodium acetate trihydrate	6131-90-4	<10%
G3640-2	Tris base	77-86-1	<1%
G3640-3	Tris base	77-86-1	<1%
G3640-4	Dithiothreitol (DTT)	3483-12-3	<20%
G3640-5	Proteinase K	39450-01-6	<5%
G3640-6	DNase; subtype unspecified	Not available	<5%
G3640-7	Tris base	77-86-1	<10%
G3640-7	Magnesium chloride hexahydrate	7791-18-6	<20%
G3640-8	Nuclease-free water	7732-18-5	≤100%

HMIRA exemption: No registry number or exemption details are supplied.

SECTION 4: First aid measures

Inhalation: Remove to fresh air and keep comfortable for breathing. If breathing is difficult or symptoms persist, obtain medical attention. Trained personnel should provide assisted breathing or oxygen when indicated.

Eye contact: Immediately rinse with plenty of water for at least 15 minutes, lifting the eyelids. Remove contact lenses if present and easy to do; continue rinsing. Obtain immediate medical attention.

Skin contact: Immediately remove contaminated clothing and shoes. Flush skin thoroughly with plenty of water for at least 15 minutes. Obtain immediate medical attention for suspected burns or persistent symptoms. Wash clothing before reuse.

Ingestion: Rinse mouth. Do not induce vomiting. Never give anything by mouth to an unconscious person. Immediately call a poison control centre or doctor.

Symptoms and effects: Skin pain, irritation or chemical burns; serious eye injury. Inhaled mist may irritate the respiratory tract.

Immediate care and treatment: Treat symptomatically and according to exposure. No product-specific antidote is identified. Urgent treatment is indicated for burns, eye injury or breathing difficulty.

SECTION 5: Fire fighting measures

Suitable extinguishing media: Use water spray, dry chemical, carbon dioxide or foam appropriate to the surrounding fire.

Unsuitable media: Avoid a solid water jet that may spread spilled material.

Specific fire hazards: Hazardous combustion products may be released in a fire. Product-specific fire and explosion test data are not available.

Firefighter protection: Wear self-contained breathing apparatus and full protective equipment. Cool exposed containers with water spray when safe. Contain contaminated firefighting water.

SECTION 6: Accidental release measures

Personal precautions: Restrict access to trained personnel. Ventilate the area and wear the protection described in Section 8. Avoid contact and aerosol or dust generation.

Containment and cleanup: Stop the leak if safe. Absorb liquid with a compatible inert absorbent. For solid components, collect gently without generating dust. Place waste in closed, labelled, compatible containers. Prevent entry into drains and waterways. Obtain specialist help for large or uncontrolled spills. Do not use bleach or acid to clean guanidine-containing spills.

SECTION 7: Handling and storage

Safe handling: Use trained laboratory personnel and appropriate ventilation. Avoid inhalation, ingestion and skin or eye contact. Do not eat, drink or smoke during handling. Wash hands after use. Avoid generating aerosols and splashes.

Storage conditions: Keep tightly closed in a dry, cool, ventilated place away from light. Use the original compatible containers; avoid metal containers. Segregate incompatible reagents. Component-specific storage temperatures are not stated in the source SDS; retain the temperature shown on each reagent label.

Incompatibilities: Bleach, acids, strong oxidizers, alkalis and reactive metal powders. Keep guanidine-containing waste separate from disinfectants.

SECTION 8: Exposure controls and personal protection

Control parameters: Product-specific occupational exposure limits and biological exposure indices are not available.

Engineering controls: Provide adequate ventilation and accessible eyewash and safety-shower facilities. Use local exhaust for operations that generate aerosols or dust.

Skin and hand protection: Wear chemical-resistant gloves and a laboratory coat. Select glove material and replacement interval using the glove manufacturer's compatibility data for the product and exposure duration.

Eye and face protection: Wear chemical splash goggles. Add a face shield where substantial splashing is possible.

Respiratory protection: Respiratory protection is not a substitute for ventilation. If ventilation cannot control exposure, use an approved respirator selected for the contaminant and workplace exposure. Emergency responders require suitable supplied-air protection.

SECTION 9: Physical and chemical properties

Property	Information
Physical state	Liquid
Colour / appearance	All eight components: clear, colourless.
Odour	Odourless.
Odour threshold	No data available.
pH	No data available.
Melting / freezing point	No data available.
Boiling point / range	No data available.
Flammability	See Section 2; quantitative mixture data are not available.
Lower / upper explosive limits	No data available.
Flash point	No data available.
Autoignition temperature	No data available.
Decomposition temperature	No data available.
Kinematic viscosity	No data available.
Solubility	Reported soluble; solvent and quantitative solubility are not specified.
Partition coefficient (n-octanol/water)	No data available.
Vapour pressure	No data available.
Relative density	No data available.
Relative vapour density	No data available.
Particle characteristics	No particle-size data available.

SECTION 10: Stability and reactivity

Reactivity: Bleach, acids, strong oxidizers, alkalis and reactive metal powders. Keep guanidine-containing waste separate from disinfectants.

Chemical stability: Stable under the recommended storage conditions.

Possibility of hazardous reactions: Contact with incompatible chemicals can release toxic gas. Further product-specific reaction data are not available.

Conditions to avoid: Excess heat, ignition sources and direct sunlight; avoid contact with incompatible materials.

Hazardous decomposition products: Product-specific data are not available. Hazardous fumes may form during fire or thermal decomposition.

SECTION 11: Toxicological information

Likely exposure routes: Skin and eye contact, accidental ingestion and inhalation of mist, vapour or aerosol.

Endpoint	Information
Acute toxicity	Harmful in contact with skin. Numerical oral and dermal LD50 values, inhalation LC50 values and mixture acute toxicity estimates are not available.
Skin corrosion / irritation	Causes severe skin burns; irritation is also reported.
Serious eye damage / irritation	Causes serious eye damage.
Respiratory / skin sensitization	Proteinase K is a respiratory sensitizing ingredient. Mixture-specific sensitization data are not available.
Germ cell mutagenicity	No data available.
Carcinogenicity	No data available.
Reproductive toxicity	No data available.
STOT, single exposure	No data available.
STOT, repeated exposure	No data available.
Aspiration hazard	No data available.

Immediate and delayed effects: Skin pain, irritation or chemical burns; serious eye injury. Inhaled mist may irritate the respiratory tract.

Numerical measures: Values stated above are source-reported. Other LD50, LC50 and mixture acute toxicity estimates are not available.

SECTION 12: Ecological information

Ecotoxicity: Harmful to aquatic life. Quantitative aquatic toxicity data are not available.

Persistence and degradability: No data available.

Bioaccumulative potential: No data available.

Mobility in soil: No data available.

Other adverse effects: No additional data available. Avoid uncontrolled environmental release.

SECTION 13: Disposal considerations

Disposal methods: Collect unused reagent, contaminated absorbent and containers for disposal through an approved laboratory chemical-waste service. Do not discharge to drains. Empty containers may retain residues. Follow applicable local, provincial and federal waste requirements. Keep guanidine-containing waste separate from bleach, acids and oxidizers.

SECTION 14: Transport information

Transport status: The supplier reports non-dangerous-goods status under IATA, IMDG and US DOT. Component-specific transport test data and classifications are not available; the kit contains reagents with corrosive health hazards.

UN transport information: UN number, proper shipping name, transport class and packing group: not assigned by the supplier.

Canadian TDG: Canadian TDG classification data are not available.

Environmental transport hazards: No transport-specific environmental hazard data available.

Special precautions: Transport at -20 °C, as specified in the source MSDS. Keep containers tightly closed and protected from damage.

Transport in bulk under IMO instruments: Not applicable to the packaged laboratory product.

SECTION 15: Regulatory information

Canada: Hazard communication uses the 16-section WHMIS SDS structure. Hazard information is stated in Section 2. Canadian inventory status, product-specific regulatory listings and HMIRA exemption information are not available.

Other jurisdictions: Product-specific regulatory determinations are not available. Research-use designation does not establish an exemption from chemical or transport requirements.

SECTION 16: Other information

Preparation / revision date: 7 October 2026. Version 1.0.

Prepared by: MediRes Corp. Email: sales@medi-res.com.

Source MSDS: Wuhan Servicebio Technology Co., Ltd.; Animal Tissue and Cell RNA Extraction Kit; source 20; version 1.0; dated 26 February 2026.

Abbreviations: GHS: Globally Harmonized System; WHMIS: Workplace Hazardous Materials Information System; STOT: specific target organ toxicity; LD50/LC50: median lethal dose/concentration; ATE: acute toxicity estimate; TDG: Transportation of Dangerous Goods; HMIRA: Hazardous Materials Information Review Act.

Disclaimer: This information is intended as guidance for safe handling, use, storage, transport and disposal of the identified material. It is not a warranty or quality specification and may not apply to other formulations, combinations or processes. No batch-specific test data are implied by reference chemical information.

End of Safety Data Sheet