

Tissue Cell Blood Genomic DNA Extraction Kit

SECTION 1: Identification

Product identifier: Tissue/Cell/Blood Genomic DNA Extraction Kit.

Product number: G3633

Other means of identification: Kit components G3633-1 through G3633-7. The kit contains separate mixtures, not one combined formulation.

Recommended use: Extraction of genomic DNA from tissue, cells and blood for research and development.

Restrictions on use: For research use only; not for diagnostic procedures or food, drug, household, agricultural or cosmetic use.

Canadian 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 an exposure, contact a local poison control centre or emergency medical service.

SECTION 2: Hazards identification

Hazard communication basis: The more severe skin and eye effects described by the manufacturer are used below. Component-specific GHS/WHMIS category assignments are not available.

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

Signal word: DANGER

Hazard pictograms



GHS05 Corrosion GHS07 Exclamation mark

Other hazards: G3633-4 and G3633-5 contain guanidine thiocyanate. Contact with bleach, acids or oxidizers can release toxic gases. Proteinase K is an ingredient with a respiratory sensitization hazard; sensitization data for the supplied mixture are not available. Avoid breathing enzyme aerosols.

Prevention: P260 - Do not breathe mist or spray. P264 - Wash hands thoroughly after handling. P280 - Wear protective gloves, protective clothing, eye protection and face 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): Take off immediately all contaminated clothing. Rinse skin with water or shower. P363 - Wash contaminated clothing before reuse. P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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.

Storage: P405 - Store locked up. Keep containers tightly closed and segregated from incompatible chemicals.

Disposal: P501 - Dispose of contents and container through an approved chemical-waste service in accordance with applicable regulations.

SECTION 3: Composition and information on ingredients

Kit of seven separate liquid mixtures. Percentages below apply to the named component, not to the total kit.

Component	Chemical name and common name	CAS No.	Content*
G3633-1	Tris(hydroxymethyl)aminomethane (Tris base)	77-86-1	<1%
G3633-1	Ethylenediaminetetraacetic acid disodium salt dihydrate (disodium EDTA dihydrate)	6381-92-6	<5%
G3633-1	Sodium chloride	7647-14-5	<5%
G3633-1	Sodium dodecyl sulfate (sodium lauryl sulfate)	151-21-3	<1%
G3633-2	Proteinase K	39450-01-6	<5%
G3633-3	Ribonuclease A (RNase A)	9001-99-4	<5%
G3633-4	Guanidine thiocyanate (guanidinium thiocyanate)	593-84-0	<40%
G3633-5	Guanidine thiocyanate (guanidinium thiocyanate)	593-84-0	<60%
G3633-6	Tris(hydroxymethyl)aminomethane (Tris base)	77-86-1	<1%
G3633-7	Tris(hydroxymethyl)aminomethane (Tris base)	77-86-1	<1%
G3633-7	Ethylenediaminetetraacetic acid disodium salt dihydrate (disodium EDTA dihydrate)	6381-92-6	<1%

***Concentration basis (w/w, w/v or v/v):** not available. Values are the upper limits stated in the manufacturer's MSDS.

Remaining ingredients: Balance of each component consists of other ingredients described by the manufacturer as not present at levels harmful to health. Chemical identities and individual concentrations are not available.

Confidential business information: HMIRA registry number and exemption details are not available.

SECTION 4: First aid measures

Eye contact: Immediately rinse with plenty of water for at least 15 minutes, including under the eyelids. Remove contact lenses if present and easy to do; continue rinsing. Do not rub the eyes. Obtain immediate medical attention.

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

Inhalation: Move the person to fresh air and keep warm, at rest and comfortable for breathing. Seek medical attention if symptoms occur, persist or are severe. If breathing is absent or abnormal, call emergency services; trained personnel should provide appropriate resuscitation or oxygen.

Ingestion: Rinse the mouth. Do not induce vomiting unless instructed by medical personnel. Never give anything by mouth to an unconscious person. Contact a poison control centre or physician promptly and provide the product identity.

Most important symptoms and effects: Harmful in contact with skin. Skin exposure may produce irritation, pain and chemical burns. Eye exposure may cause irritation, pain and serious eye damage. Enzyme aerosols may cause respiratory sensitization. Delayed effects data are not available.

Immediate medical attention and special treatment: Obtain immediate medical attention for eye exposure, suspected burns or breathing difficulty. No specific antidote is identified. Treat according to exposure and clinical findings.

SECTION 5: Fire fighting measures

Suitable extinguishing media: Water mist, alcohol-resistant foam, dry powder or carbon dioxide, selected for the surrounding fire.

Unsuitable extinguishing media: No information available.

Specific hazards and combustion products: Product-specific combustion data are not available. Toxic decomposition products may be generated during a fire. Keep incompatible chemicals away; see Section 10.

Protection for firefighters: Wear self-contained breathing apparatus and full protective clothing for chemical fires. Prevent contaminated extinguishing water from entering drains. No data are provided for sensitivity to mechanical impact or static discharge.

SECTION 6: Accidental release measures

Personal precautions and emergency procedures: Keep unnecessary and unprotected personnel away. Do not touch or walk through spilled material. Avoid inhaling mist or aerosols. Provide adequate ventilation and wear the protection in Section 8. Only trained personnel should undertake cleanup. Evacuate and obtain specialist assistance for a large, uncontrolled or incompatible-chemical spill.

Containment and cleanup: Stop the leak if safe. Contain and absorb liquid with compatible inert absorbent, then collect in a closed, labelled, chemically compatible waste container. Prevent entry to drains or waterways. Do not add bleach, acids or oxidizers to spills or collected waste containing G3633-4 or G3633-5.

SECTION 7: Handling and storage

Safe handling: Use with adequate ventilation. Avoid splashes, aerosol generation and contact with skin, eyes or clothing. Keep containers labelled and closed when not in use. Use good laboratory hygiene; wash hands before breaks and after work.

Storage conditions: The source specifies tightly closed containers in a dry, cool, well-ventilated place, protected from light; no metal containers. Keep away from alkalis, strong oxidizers and reactive metal powders. Also segregate guanidine-containing reagents from acids and bleach.

Storage temperature: Component-specific storage temperatures are not available. Store according to the component labels. Transport temperature: -20 °C, as specified by the manufacturer.

SECTION 8: Exposure controls and personal protection

Control parameters: Occupational exposure limits and biological exposure indices for the supplied mixtures are not available.

Engineering controls: Provide adequate ventilation and readily accessible eyewash and safety shower facilities. Use local exhaust when handling could generate aerosols or mist.

Eye and face protection: Wear chemical splash goggles and a face shield where splashing may occur.

Hand and body protection: Wear suitable chemical-resistant gloves and laboratory protective clothing. Select glove material and breakthrough time with the glove supplier for the specific reagent and task. Inspect gloves before use; remove without touching the contaminated exterior. Wash and dry hands after removal.

Respiratory protection: Avoid breathing mist and enzyme aerosols. Where engineering controls cannot adequately control exposure, use a suitable approved respirator selected through a workplace respiratory protection assessment.

Hygiene and environmental controls: Keep food and drink out of the work area. Remove contaminated clothing. Prevent discharge to drains and the environment.

SECTION 9: Physical and chemical properties

Information relates to the separate reagents as supplied.

Property	Information
Physical state	Liquid for G3633-1 through G3633-7.
Colour and appearance	G3633-1, -2, -4, -5, -6 and -7: clear, colourless. G3633-3: transparent, light yellow.
Odour / odour threshold	Odourless for all seven components / threshold not available.
Melting point / freezing point	No data available.
Boiling point / initial boiling point and range	No data available.
Flammability	No data available.
Lower / upper explosion or flammability limits	No data available.
Flash point / auto-ignition temperature	No data available.

Property	Information
Decomposition temperature	No data available.
pH / kinematic viscosity	No data available.
Solubility	Soluble. Solvent and quantitative solubility data are not available.
Partition coefficient n-octanol/water (log value)	No data available.
Vapour pressure / relative vapour density	No data available.
Density / relative density	No data available.
Particle characteristics	Not applicable to the supplied liquids.
Other properties	Evaporation rate, explosive and oxidizing properties: no data available.

SECTION 10: Stability and reactivity

Reactivity: Guanidine thiocyanate-containing components G3633-4 and G3633-5 can generate toxic gases on contact with bleach, acids or other oxidizers.

Chemical stability: Stable under the recommended storage conditions.

Possibility of hazardous reactions: Do not mix guanidine-containing reagents or their waste with bleach or acids. Other product-specific reaction data are not available.

Conditions to avoid: Heat, flames and sparks. Avoid unintended mixing with incompatible chemicals.

Incompatible materials: Alkalis, strong oxidizers, reactive metal powders and metal containers. Keep guanidine thiocyanate-containing reagents and waste away from acids and bleach.

Hazardous decomposition products: No product-specific thermal decomposition data are available. Toxic gases may form during incompatible reactions; their exact composition depends on conditions.

SECTION 11: Toxicological information

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

Endpoint	Information
Acute toxicity	Harmful in contact with skin. Numerical oral LD50, dermal LD50, inhalation LC50 and acute toxicity estimates are not available.
Skin corrosion or irritation	Causes severe skin burns. Irritation is also reported.
Serious eye damage or irritation	Causes serious eye damage. Irritation is also reported.
Respiratory or skin sensitization	Proteinase K is an ingredient with a respiratory sensitization hazard. Mixture-specific respiratory and skin sensitization data are not available.
Germ cell mutagenicity	No data available.

Endpoint	Information
Carcinogenicity / reproductive toxicity	No data available for the kit mixtures.
Specific target organ toxicity	Single exposure and repeated exposure: no data available.
Aspiration hazard	No data available.

Symptoms and immediate or delayed effects: Skin and eye irritation, pain, chemical burns and serious eye damage. Proteinase K aerosol exposure may cause respiratory sensitization. Time-course and chronic-effect data for the supplied mixtures are not available.

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

SECTION 12: Ecological information

Ecotoxicity: Harmful to aquatic life (H402). 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 data available. Avoid release to drains, soil and surface waters.

SECTION 13: Disposal considerations

Waste treatment methods: Do not discharge product or contaminated waste to sewage. Collect residues, unused reagents, contaminated absorbents and affected packaging in labelled, chemically compatible containers. Arrange disposal through an appropriate chemical-waste service in accordance with applicable local, provincial and federal requirements.

Guanidine-containing waste: Keep G3633-4, G3633-5 and all waste containing these components separate from bleach, acids and oxidizers. Do not use bleach to disinfect this waste; toxic fumes may form.

Biologically contaminated waste: Waste containing tissue, cells or blood and kit chemicals may have both biological and chemical hazards. Obtain an approved disposal or decontamination method that accounts for both hazards.

Contaminated packaging: Handle packaging with residual reagent using the same precautions as the reagent. Do not reuse contaminated containers for other purposes.

SECTION 14: Transport information

Transport item	Information
IATA / IMDG / DOT US	Not dangerous goods during transportation, according to the manufacturer's MSDS.
Canadian TDG	Classification data are not available.
UN number / proper shipping name	Not assigned in the manufacturer's MSDS.

Transport item	Information
Transport hazard class / packing group	Not assigned in the manufacturer's MSDS.
Environmental transport hazards	No transport-specific data available.
Special precautions	Transport at -20 °C, as specified by the manufacturer.
Bulk transport under IMO instruments	Not applicable to the packaged kit.

SECTION 15: Regulatory information

Canada: Component-specific WHMIS hazard classification data are not available. Applicable framework: Hazardous Products Act and Hazardous Products Regulations.

Other jurisdictions: Chemical inventory status and jurisdiction-specific regulatory determinations for the supplied mixtures are not available.

SECTION 16: Other information

Revision date: 23 September 2026. Version: 1.0.

Prepared by: MediRes Corp. Contact sales@medi-res.com for the current version of this SDS.

References

CDC. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories, section 8.2.10: Guanidinium solutions.

Tokyo Chemical Industry. Proteinase K, CAS 39450-01-6, product P3013, ingredient hazard information.

Disclaimer: The information in this Safety Data Sheet is intended as guidance for safe handling, use, storage, transport and disposal of the identified product. It is not a warranty or quality specification and may not apply when this product is used with other materials or in other processes.

End of Safety Data Sheet