

Material Safety Data Sheet

Kit

Product Name	Cat.#
Plasma/Serum Cell-free DNA/RNA Extraction Kit (Magnetic Beads)	50102
Urine Cell-free DNA Extraction Kit (Magnetic Beads)	50103; 50104

Kit component

Cat. #	50102	50103; 50104
	Plasma Beads	Urine Beads
	SPT Buffer	SPT Buffer
	Proteinase K	Proteinase K
	GSO Buffer	GSO Buffer
	Elution Buffer	Elution Buffer
	PRE Buffer	US Buffer
		THP Buffer
		Urine Lysis Buffer

Urine Lysis Buffer, GSO Buffer, SPT Buffer

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Urine Lysis Buffer
GSO Buffer
SPT Buffer

Use of The Substance: For R&D/experimental use only

Company Identification: BioDynami

Address: 601 Genome Way, Huntsville, AL 35806, USA

E-mail: support@biodynami.com

SECTION 2 - HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):

Acute toxicity, Oral (Category 4), H302

Acute toxicity, Inhalation (Category 4), H332

Acute toxicity, Dermal (Category 4), H312

Skin corrosion (Category 1C), H314

Serious eye damage (Category 1), H318

Short-term (acute) aquatic hazard (Category 3), H402

Long-term (chronic) aquatic hazard (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

GHS Label elements, including precautionary statements

Pictogram



GHS05



GHS07

Signal word Danger

Hazard statements

H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled.

H314 Causes severe skin burns and eye damage.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P260 Do not breathe dust.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.

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/ shower.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Immediately call a POISON CENTER/ doctor.

P305 + P351 + P338 + P310

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Hazard description:

Chemical Name	EC No.	CAS-No
Guanidinium thiocyanate	209-812-1	593-84-0
Sodium Lauroyl Sarcosine	205-281-5	137-16-6

SECTION 4 - FIRST AID MEASURES

Inhalation: Remove to fresh air. Get medical attention immediately.

Skin: Wash off immediately with plenty of soap and water. Get medical attention immediately.

Eye: Flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Ingestion: If swallowed, contact a Poison Control Center or seek medical attention immediately. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE FIGHTING MEASURES

Extinguishing Media: Water, foam, carbon dioxide or dry chemical as suitable for surrounding materials.

Special Exposure Hazards: Not applicable.

Special Protective Equipment: Wear approved pressure-demand self-contained breathing apparatus and full protective gear.

Hazardous Decomposition: Not applicable.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions: Prevent skin/eye contact. Use personal protective equipment as needed.

Environmental Methods for Cleaning Up: Cover with absorbent material and sweep up being careful not to create dust. Place into suitable waste container for later disposal.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 7 - HANDLING AND STORAGE

Handling: Avoid contact with skin and eyes.

Storage: Keep container tightly closed.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Personal protective equipment

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection: Protective gloves.

Eye protection: Protective goggles.

Skin and body protection: Appropriate protective clothing.

Hygiene measures: Do not eat, drink or smoke when handling this product. Wash thoroughly after handling.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: aqueous solution

Odor: None

Flash point: Not available

Solubility: Aqueous solution

Density (water = 1): Not available.
Boiling point: Approximately 100°C
Melting point: Not applicable
pH: 8

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable.

Possibility of hazardous reactions: No data available

Conditions to avoid: Contact with acids liberates very toxic gas.

Materials to avoid: Strong acids, Strong oxidizing agents, Cyanides

Hazardous decomposition products: Hazardous decomposition products formed under fire conditions.

- Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides

SECTION 11 - TOXICOLOGICAL INFORMATION

Skin Contact: No Data Available

Skin Absorption: No Data Available

Inhalation: No Data Available

Ingestion: No Data Available

Eye Contact: No Data Available

Acute Effects from Overexposure: No Data Available

Chronic Effects from Overexposure: No Data available

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: No Data Available

Mobility: Not available

Persistence and Degradability: Not available

Bioaccumulative Potential: Not available

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of unused product, residues, and containers according to local, regional, state, and national regulations.

SECTION 14 - TRANSPORT INFORMATION

Not regulated as hazardous for transportation.

SECTION 15 - REGULATORY INFORMATION

US Regulations: Components of this product are listed on the TSCA inventory. No components are listed on U.S. SARA Title III. This product does not contain any chemicals currently on the California list of known carcinogens and reproductive toxins.

EU Regulations: This preparation does not meet the dangerous preparations classification criteria under 1999/45/EC. Not all components of this product are listed on EINECS.

Canadian Regulations: This product is not considered hazardous based on WHMIS criteria.

SECTION 16 - OTHER INFORMATION

This information is based on our present knowledge and shall be used only as a guide. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. BioDynami is not held liable for any damage resulting from handling or from contact with the above mentioned products.

Elution Buffer, PRE buffer, US Buffer, THP Buffer, and Beads

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Elution Buffer, PRE buffer, US Buffer, THP Buffer, Plasma Beads, Urine-A Beads, Urine-B Beads

Use of The Substance: For R&D/experimental use only

Company Identification: BioDynami

Address: 601 Genome Way, Huntsville, AL 35806, USA

E-mail: support@biodynami.com

SECTION 2 - HAZARDS IDENTIFICATION

Emergency Overview: Not expected to present an immediate, significant hazard if spilled.

Health Effects: No significant hazard expected.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Hazard description: Not applicable.

Human health hazards: Not applicable.

Environmental Hazards: Not applicable.

SECTION 4 - FIRST AID MEASURES

Inhalation: Remove to fresh air. If breathing becomes difficult, call a physician.

Skin: Wash off immediately with plenty of soap and water. If irritation develops, get medical attention.

Eye: Flush eyes with plenty of water for at least 15 minutes. If irritation persists, get medical attention.

Ingestion: If swallowed, contact a Poison Control Center or seek medical attention immediately. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE FIGHTING MEASURES

Extinguishing Media: Water, foam, carbon dioxide or dry chemical as suitable for surrounding materials.

Special Exposure Hazards: Not applicable.

Special Protective Equipment: Wear approved pressure-demand self-contained breathing apparatus and full protective gear.

Hazardous Decomposition: Not applicable.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions: Prevent skin/eye contact. Use personal protective equipment as needed.

Environmental Methods For Cleaning Up: Cover with absorbent material and sweep up being careful not to create dust. Place into suitable waste container for later disposal.

SECTION 7 - HANDLING AND STORAGE

Handling: Avoid contact with skin and eyes.

Storage: Keep container tightly closed.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limit Values: Not available.

Personal protective equipment

Respiratory protection: Not applicable.

Hand protection: Protective gloves.

Eye protection: Protective goggles.

Skin and body protection: Appropriate protective clothing.

Hygiene measures: Do not eat, drink or smoke when handling this product. Wash thoroughly after handling.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: aqueous solution
Odor: None
Flash point: Not available
Solubility: Aqueous solution
Density (water = 1): Not available.
Boiling point: Approximately 100°C
Melting point: Not applicable
pH: around 7

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable.

Hazardous Decomposition Products: No dangerous decomposition products known.

SECTION 11 - TOXICOLOGICAL INFORMATION

Skin Contact: No Data Available
Skin Absorption: No Data Available
Inhalation: No Data Available
Ingestion: No Data Available
Eye Contact: No Data Available
Acute Effects from Overexposure: No Data Available
Chronic Effects from Overexposure: No Data available

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: No Data Available
Mobility: Not available
Persistence and Degradability: Not available
Bioaccumulative Potential: Not available

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of unused product, residues, and containers according to local, regional, state, and national regulations.

SECTION 14 - TRANSPORT INFORMATION

Not regulated as hazardous for transportation.

SECTION 15 - REGULATORY INFORMATION

US Regulations: Components of this product are listed on the TSCA inventory. No components are listed on U.S. SARA Title III. This product does not contain any chemicals currently on the California list of known carcinogens and reproductive toxins.

EU Regulations: This preparation does not meet the dangerous preparations classification criteria under 1999/45/EC. Not all components of this product are listed on EINECS.

Canadian Regulations: This product is not considered hazardous based on WHMIS criteria.

SECTION 16 - OTHER INFORMATION

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Proteinase K

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Proteinase K

Use of The Substance: For R&D/experimental use only

Company Identification: BioDynami

Address: 601 Genome Way, Huntsville, AL 35806, USA

E-mail: support@biodynami.com

SECTION 2 - HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS08 Health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Repr. 1B H360 May damage fertility or the unborn child.

Pictogram



GHS08

Signal word Danger

Hazard-determining components of labeling:

Proteinase K; RNase

Hazard statements

May cause damage to organs.

Precautionary statements

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

IF exposed or concerned: Call a poison center/doctor.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Hazard description: Proteinase K

SECTION 4 - FIRST AID MEASURES

Inhalation: Remove to fresh air. Get medical attention immediately.

Skin: Wash off immediately with plenty of soap and water. Get medical attention immediately.

Eye: Flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Ingestion: If swallowed, contact a Poison Control Center or seek medical attention immediately. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE FIGHTING MEASURES

Extinguishing Media: Water, foam, carbon dioxide or dry chemical as suitable for surrounding materials.

Special Exposure Hazards: Not applicable.

Special Protective Equipment: Wear approved pressure-demand self-contained breathing apparatus and full protective gear.

Hazardous Decomposition: Not applicable.

SELECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions: Prevent skin/eye contact. Use personal protective equipment as needed.

Environmental Methods For Cleaning Up: Cover with absorbent material and sweep up being careful not to create dust. Place into suitable waste container for later disposal.

SECTION 7 - HANDLING AND STORAGE

Handling: Avoid contact with skin and eyes.

Storage: Keep container tightly closed.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory protection: Not applicable.

Hand protection: Protective gloves.

Eye protection: Protective goggles.

Skin and body protection: Appropriate protective clothing.

Hygiene measures: Do not eat, drink or smoke when handling this product. Wash thoroughly after handling.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: aqueous solution

Odor: None

Flash point: Not available

Solubility: Aqueous solution

Density (water = 1): Not available.

Boiling point: Approximately 100°C

Melting point: Not applicable

pH: 7.5

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable.

Hazardous Decomposition Products: No dangerous decomposition products known.

SECTION 11 - TOXICOLOGICAL INFORMATION

To the best of our knowledge, the chemical, physical, and toxicological properties of this product have not been thoroughly investigated.

Product Toxicity Data:

The following are calculated estimates for the product:

Proteinase K:

Acute Toxicity Estimate (Oral) > 2000 mg/kg

Acute Toxicity Estimate (Dermal) > 2000 mg/kg

Acute Toxicity Estimate (Inhalation) > 10 mg/L

Degree of Irritation: The product is not reported to cause skin or eye irritation.

Sensitization: This product contains a reported respiratory sensitizer.

Review of Acute Symptoms: See Section 2 (Hazards Information) and Section 4 (First-Aid Measures) for additional details.

Carcinogenicity Status: No component of this product is listed as a carcinogen according to the NTP (National Toxicology Program), IARC (International Agency for Research on Cancer), or OSHA (US Occupational Safety and Health Administration).

Reproductive Toxicity Information: The components of this product are not reported to cause reproductive effects under typical circumstances of exposure.

Mutagenic Effects: The components of this product are not reported to cause mutagenic effects under typical circumstances of exposure.

Specific Target Organ Toxicity - Single Exposure: Not applicable.

Specific Target Organ Toxicity – Repeated Exposure: Not applicable.

Aspiration Hazard: Not applicable.

Toxicologically Synergistic Products: None known.

Additional Toxicology Information: Not applicable.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: No Data Available

Mobility: This product is anticipated to be mobile in soil.

Persistence and Degradability: When released into the soil, the components of this product are expected to biodegrade, dissipate in soils via oxidation, or otherwise chemically degrade or photo-decompose via solar radiation.

Bioaccumulative Potential: The components of this product are not anticipated to bioaccumulate in any significant quantities.

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of unused product, residues, and containers according to local, regional, state, and national regulations.

SECTION 14 - TRANSPORT INFORMATION

Not regulated as hazardous for transportation.

SECTION 15 - REGULATORY INFORMATION

US Regulations: Components of this product are listed on the TSCA inventory. No components are listed on U.S. SARA Title III. This product does not contain any chemicals currently on the California list of known carcinogens and reproductive toxins.

EU Regulations: This preparation does not meet the dangerous preparations classification criteria under 1999/45/EC. Not all components of this product are listed on EINECS.

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BioDynami
Jun. 15, 2026