



SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - Europe

Rev A3: 10/08/2023

SECTION 1: Identification of the Substance and Company/Undertaking

1.1 Product Identifier

Product name: egSEQ Hyb & Wash Kit (Module A)
 Cat. No. EG1301S
 Specification 16rxn
 Component Cat. No. EG130101S Hyb Human Block
 EG130102S RNase Block
 EG130103S Hyb Buffer

1.2 Relevant identified uses of the substance and uses advised against

Identified Uses: Analytical reagent
 Restricted Uses: For research use only. Not available for diagnostic procedures.
 Mixture supplied to that use in form of: A mixture
 Product Category by type of chemical: Analytical reagent

1.3 Details of the supplier of the Safety data Sheet

Address: Edinburgh Genetics Limited
 Pentlands Science Park,
 Penicuik, United Kingdom
 EH26 0PZ
 Telephone Number: +44 1312616686
 Email Address: sales@eggenetics.com

1.4 Emergency Telephone: +44 1312616686

SECTION 2: Hazards Identification

2.1 Classification of the mixture

2.1.1 Emergency Overview

| | |
|-----------------|---|
| Hyb Human Block | Colourless, Liquid. No known significant |
| RNase Block | Colourless, Liquid. No known significant |
| Hyb Buffer | Colourless, Liquid. H316-Causes mild skin irritation. H402-Harmful to aquatic life. |

2.1.2 Classification according to Regulation (EC) No 1272/2008 (including amendments):

| | |
|-----------------|---|
| Hyb Human Block | Not classified |
| RNase Block | Not classified |
| Hyb Buffer | Skin corrosion/irritation-Category 3 Hazardous to aquatic environment, short-term (Acute)-Category 3 |

2.1.3 GHS Hazard Category

| | |
|-----------------|--|
| Hyb Human Block | Not classified |
| RNase Block | Not classified |
| Hyb Buffer | H316-Causes mild skin irritation. —Skin corrosion/irritation-Category 3 H402-Harmful to aquatic life. —Hazardous to aquatic environment, short-term (Acute)-Category 3 |

2.2 Label elements:

Hazard Pictogram:

| | |
|-----------------|------|
| Hyb Human Block | None |
| RNase Block | None |
| Hyb Buffer | None |

Signal word:

| | |
|-----------------|----------------|
| Hyb Human Block | No signal word |
| RNase Block | No signal word |
| Hyb Buffer | Warning |

| | | |
|---------------------------|-----------------|--|
| Hazard statements: | Hyb Human Block | No known significant effects or critical |
| | RNase Block | No known significant effects or critical |
| | Hyb Buffer | H316-Causes mild skin irritation. H402-Harmful to aquatic life. |

| | | |
|--------------------|-----------------|--|
| Prevention: | Hyb Human Block | N/A |
| | RNase Block | N/A |
| | Hyb Buffer | P273-Avoid release to the environment. |

| | | |
|------------------|-----------------|---|
| Disposal: | Hyb Human Block | N/A |
| | RNase Block | |
| | Hyb Buffer | P501-Dispose of contents/containers according to local/regional/national/international regulations. |

| | | |
|-----------------|-----------------|-----|
| Storage: | Hyb Human Block | N/A |
| | RNase Block | N/A |
| | Hyb Buffer | N/A |

2.3 **Other Hazards:** N/A

SECTION 3: Composition / Information on Ingredients

| | | |
|-----------------------|-----------------|---------|
| 3.1 Substances | Hyb Human Block | Mixture |
| | RNase Block | Mixture |
| | Hyb Buffer | Mixture |

3.2 **Composition**

| Product identifier type in accordance with Article 18(2) of Regulation (EC) No 1272/2008 | Proportion | Identifiers | EC Number |
|--|------------|---------------------------------|---|
| Hyb Human Block | | | |
| No ingredients harmful to health or environment. | | | |
| RNase Block | | | |
| No ingredients harmful to health or environment. | | | |
| Hyb Buffer | | | |
| Ethylene Diamine Tetraacetic Acid | 10 to 25 | EC: 200-449-4 CAS: 60-00-4 | Eye Irrit. 2, H319 Acute Tox. 4, H332 STOT RE 2, H373 Aquatic Chronic 3, H412 STOT SE 3, H335 |
| Dodecyl Sodium Sulfonate | <2.5 | EC: 219-200-6 CAS: 2386-53-0 | No hazards have been classified. |

SECTION 4: First-Aid Measures

4.1 **Description of First Aid Measures**

Inhalation:

| | |
|-----------------|--|
| Hyb Human Block | Move exposed person to fresh air. Get medical attention if adverse health effects persist or are severe. |
| RNase Block | Move exposed person to fresh air. Get medical attention if adverse health effects persist or are severe. |
| Hyb Buffer | Move exposed person to fresh air. Get medical attention if adverse health effects persist or are severe. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. |

Ingestion:

| | |
|-----------------|--|
| Hyb Human Block | Wash mouth with water. Move exposed person to fresh air. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If vomiting occurs, keep the head down to avoid vomit entering the lungs. Get medical attention if adverse health effects persist or are severe. |
| RNase Block | Wash mouth with water. Move exposed person to fresh air. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If vomiting occurs, keep the head down to avoid vomit entering the lungs. Get medical attention if adverse health effects persist or are severe. |

Hyb Buffer Wash out mouth with water. Move exposed person to fresh air. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If vomiting occurs, keep the head down to avoid vomit entering the lungs. Get medical attention if adverse health effects persist or are severe.

Skin Contact:

Hyb Human Block Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if adverse health effects persist or are severe.

RNase Block

Hyb Buffer Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention if adverse health effects persist or are severe. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Eye Contact:

Hyb Human Block Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

RNase Block

Hyb Buffer Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

First Aider Protection: None specific

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects:

Hyb Human Block No known significant effects or critical hazards.
 RNase Block No known significant effects or critical hazards.
 Hyb Buffer Causes mild skin irritation. Causes eye irritation.

Over-exposure signs/symptoms:

Hyb Human Block No specific data.
 RNase Block No specific data.
 Hyb Buffer Skin irritation and redness. Eye pain or irritation, tears and redness.

4.3 Indication of immediate medical attention and special treatment needed

Specific Treatments

Hyb Human Block None Specific
 RNase Block None Specific
 Hyb Buffer None Specific

Notes to Physician

Hyb Human Block Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
 RNase Block Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
 Hyb Buffer Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

No action shall be taken involving any personal risk or without suitable training.

SECTION 5: Fire-Fighting Measures

5.1 Extinguishing media (small and large fires)

Small Fire: Use an extinguishing agent suitable for the surrounding fire.

Large Fire: Use an extinguishing agent suitable for the surrounding fire.

Avoid: None

5.2.1 Specific Hazards: In a fire or if heated, a pressure increase will occur and the container may burst

5.2.2 Protective equipment and advice for fire fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency measures

6.1.1 For non-emergency personnel:

| | |
|-----------------|---|
| Hyb Human Block | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. |
| RNase Block | Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8). |
| Hyb Buffer | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8). |

6.1.2 For emergency responders:

| | |
|-----------------|--|
| Hyb Human Block | If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment (see Section 8). |
| RNase Block | |
| Hyb Buffer | |

6.2 Environmental Precautions:

| | |
|-----------------|---|
| Hyb Human Block | Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). |
| RNase Block | |
| Hyb Buffer | |

6.3 Methods and materials for containment and cleaning up:

| | |
|-----------------|--|
| Hyb Human Block | Stop leak if without risk. Move containers from spill area. Dilute with water and mop up. Dispose of via a licensed waste disposal contractor. |
| RNase Block | |
| Hyb Buffer | |

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

| | |
|-----------------|---|
| Hyb Human Block | Put on appropriate personal protective equipment (see Section 8). |
| RNase Block | |
| Hyb Buffer | Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. |

7.2 Conditions for safe storage, including any incompatibilities:

| | |
|-----------------|--|
| Hyb Human Block | Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. |
| RNase Block | |
| Hyb Buffer | |

7.3 Specific end use(s) recommendations:

| | |
|-----------------|---|
| Hyb Human Block | Industrial applications, Professional applications. |
| RNase Block | |
| Hyb Buffer | |

SECTION 8: Exposure Controls/Personal Protection

8.1 Control Parameters

| Product/ingredient name | Component in the Kit | Exposure limit values |
|-------------------------|----------------------|-----------------------|
| Hyb Human Block | N/A | N/A |
| RNase Block | N/A | N/A |
| Hyb Buffer | N/A | N/A |

8.2 Exposure controls

| | |
|-----------------------------------|---|
| Appropriate engineering controls: | If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. |
| Respiratory protection: | Wear medical protective mask. |

| | |
|---|--|
| Hand protection: | Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products. |
| Eye protection: | If contact is possible, the following protection should be worn: chemical splash goggles and/or face shield. |
| Skin protection: | Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Generally, it is recommended to wear a white coat, disposable head cover and disposable shoe cover for protection. |
| Environmental exposure controls: | Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. |

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical State:

| | |
|-----------------|--------|
| Hyb Human Block | Liquid |
| RNase Block | Liquid |
| Hyb Buffer | Liquid |

9.2 Colour:

| | |
|-----------------|------------------|
| Hyb Human Block | Colourless |
| RNase Block | Colourless |
| Hyb Buffer | Slightly yellow. |

9.3 Odour:

| | |
|-----------------|------------------|
| Hyb Human Block | Odourless |
| RNase Block | Odourless |
| Hyb Buffer | Irritating odour |

9.4 Odour threshold:

| | |
|-----------------|-----|
| Hyb Human Block | N/A |
| RNase Block | N/A |
| Hyb Buffer | N/A |

9.5 pH:

| | |
|-----------------|-------------|
| Hyb Human Block | 7.5 |
| RNase Block | N/A |
| Hyb Buffer | 7.9 +/- 0.3 |

9.6 Melting/Freezing point:

| | |
|-----------------|-----|
| Hyb Human Block | 0°C |
| RNase Block | N/A |
| Hyb Buffer | N/A |

9.7 Initial boiling point and boiling range:

| | |
|-----------------|-------|
| Hyb Human Block | 100°C |
| RNase Block | N/A |
| Hyb Buffer | N/A |

9.8 Flash point:

| | |
|-----------------|-----|
| Hyb Human Block | N/A |
| RNase Block | N/A |
| Hyb Buffer | N/A |

9.9 Evaporation rate:

| | |
|-----------------|-----|
| Hyb Human Block | N/A |
| RNase Block | N/A |
| Hyb Buffer | N/A |

9.1 Flammability:

| | |
|-----------------|-----|
| Hyb Human Block | N/A |
| RNase Block | N/A |
| Hyb Buffer | N/A |

9.11 Upper/lower flammability or explosive limits:

| | |
|-----------------|-----|
| Hyb Human Block | N/A |
| RNase Block | N/A |
| Hyb Buffer | N/A |

9.12 **Vapour pressure:**

| | |
|-----------------|--|
| Hyb Human Block | The main component of the reagent is water. At 20 °C, the steam pressure of water is 3.2 kPa. At 50 °C, the vapor pressure of water is 12.3 kPa. |
| RNase Block | |
| Hyb Buffer | N/A |

9.13 **Vapour density**

| | |
|-----------------|-----|
| Hyb Human Block | N/A |
| RNase Block | N/A |
| Hyb Buffer | N/A |

9.14 **Relative vapour density (air=1):**

| | |
|-----------------|-----|
| Hyb Human Block | N/A |
| RNase Block | N/A |
| Hyb Buffer | N/A |

9.15 **Solubility:**

| | |
|-----------------|------------------|
| Hyb Human Block | Soluble in water |
| RNase Block | Soluble in water |
| Hyb Buffer | Soluble in water |

9.16 **Partition coefficient (n-octanol/water):**

| | |
|-----------------|-----|
| Hyb Human Block | N/A |
| RNase Block | N/A |
| Hyb Buffer | N/A |

9.17 **Auto-ignition temperature:**

| | |
|-----------------|-----|
| Hyb Human Block | N/A |
| RNase Block | N/A |
| Hyb Buffer | N/A |

9.18 **Decomposition temperature:**

| | |
|-----------------|-----|
| Hyb Human Block | N/A |
| RNase Block | N/A |
| Hyb Buffer | N/A |

9.19 **Viscosity:**

| | |
|-----------------|-----|
| Hyb Human Block | N/A |
| RNase Block | N/A |
| Hyb Buffer | N/A |

SECTION 10: Stability and Reactivity

10.1 **Reactivity:**

| | |
|-----------------|--------|
| Hyb Human Block | Stable |
| RNase Block | Stable |
| Hyb Buffer | Stable |

10.2 **Chemical stability:**

| | |
|-----------------|--------|
| Hyb Human Block | Stable |
| RNase Block | Stable |
| Hyb Buffer | Stable |

10.3 **Possibility of hazardous reactions:**

| | |
|-----------------|---|
| Hyb Human Block | Under normal conditions of storage and use, hazardous reactions will not occur. |
| RNase Block | |
| Hyb Buffer | |

10.4 **Conditions to Avoid:**

| | |
|-----------------|------------------|
| Hyb Human Block | No specific data |
| RNase Block | |
| Hyb Buffer | |

10.5 **Incompatible materials:**

| | |
|-----------------|------------------|
| Hyb Human Block | No specific data |
| RNase Block | |
| Hyb Buffer | |

10.6 **Hazardous decomposition products:**

| | |
|-----------------|--|
| Hyb Human Block | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| RNase Block | |
| Hyb Buffer | |

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Acute toxicity:

| Product/ingredient name | Result | Species | Dose | Exposure |
|--|-----------|---------|------------|----------|
| Hyb Human Block | | | | |
| No ingredients harmful to health or environment. | | | | |
| RNase Block | | | | |
| No ingredients harmful to health or environment. | | | | |
| Hyb Buffer | | | | |
| Ethylene Diamine Tetraacetic Acid | LD50 Oral | Rat | 2g/kg | / |
| Dodecyl Sodium Sulfonate | LD50 Oral | Rat | 1288 mg/kg | / |

11.2

Irritation/Corrosion

| Product/ingredient name | Result | Species | Exposure |
|--|--------|---------|----------|
| Hyb Human Block | | | |
| No ingredients harmful to health or environment. | | | |
| RNase Block | | | |
| No ingredients harmful to health or environment. | | | |
| Hyb Buffer | | | |
| Ethylene Diamine Tetraacetic Acid | N/A | N/A | N/A |
| Dodecyl Sodium Sulfonate | N/A | N/A | N/A |

11.3

Senitiser

| | |
|-----------------|-----|
| Hyb Human Block | N/A |
| RNase Block | |
| Hyb Buffer | |

11.4

Mutagenicity:

| | |
|-----------------|-----|
| Hyb Human Block | N/A |
| RNase Block | |
| Hyb Buffer | |

11.5

Carcinogenicity:

| | |
|-----------------|-----|
| Hyb Human Block | N/A |
| RNase Block | |
| Hyb Buffer | |

11.6

Reproductive toxicity:

| | |
|-----------------|-----|
| Hyb Human Block | N/A |
| RNase Block | |
| Hyb Buffer | |

11.7

Specific target organ toxicity (single exposure):

| | |
|-----------------|-----|
| Hyb Human Block | N/A |
| RNase Block | |
| Hyb Buffer | |

11.8

Specific target organ toxicity (repeated exposure):

| | |
|-----------------|-----|
| Hyb Human Block | N/A |
| RNase Block | |
| Hyb Buffer | |

11.9

Aspiration hazard:

| | |
|-----------------|-----|
| Hyb Human Block | N/A |
| RNase Block | |
| Hyb Buffer | |

SECTION 12: Ecological Information

12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|--|--------|---------|----------|
| Hyb Human Block | | | |
| No ingredients harmful to health or environment. | | | |
| RNase Block | | | |
| No ingredients harmful to health or environment. | | | |
| Hyb Buffer | | | |




| | | | |
|-----------------------------------|---------------------------------|------|-----|
| Ethylene Diamine Tetraacetic Acid | Acute LC50 320 mg/L Fresh water | Fish | 96h |
| Dodecyl Sodium Sulfonate | N/A | N/A | N/A |

| | | |
|------|--|-----|
| 12.2 | Persistence and degradability: | N/A |
| 12.3 | Bioaccumulative potential: | N/A |
| 12.4 | Mobility in soil: | N/A |
| 12.5 | Results of PBT and vPvB assessment: | N/A |
| 12.6 | Other adverse effects: | N/A |

SECTION 13: Disposal Considerations

| | | |
|------|---------------------------------|--|
| 13.1 | Waste treatment methods: | The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. |
|------|---------------------------------|--|

SECTION 14: Transport Information

| | UN number | UN proper shipping name | Transport hazard class(es) | Transport hazard symbol | Environmental hazards | Packing group |
|---------|-----------|-------------------------|----------------------------|---|-----------------------|---------------|
| ADR/RID | UN3316 | CHEMICAL KIT | 9 |  | No. | II |
| IATA | UN3316 | Chemical kit | 9 |  | No. | II |
| IMDG | UN3316 | CHEMICAL KIT | 9 |  | No. | II |

| | | |
|------|---|--|
| 14.1 | Precautions for transportation : | Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. |
|------|---|--|

SECTION 15: Regulatory Information

| Nation | Regulation | Information |
|---------------|---|--|
| International | Chemical Weapon Convention List Schedules I, II & III Chemicals | Not listed. |
| International | Montreal Protocol (Annexes A, B, C, E) | Not listed. |
| International | Stockholm Convention on Persistent Organic Pollutants | Not listed. |
| International | Rotterdam Convention on Prior Inform Consent (PIC) | Not listed. |
| International | UNECE Aarhus Protocol on POPs and Heavy Metals | Not listed. |
| Europe | Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH) | All components are not listed in the list. |
| United States | Toxic Substances Control Act (TSCA) | Not listed. |
| United States | TSCA Chemical Substance Inventory | All components are not listed in the list. |
| Japan | Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. | All components are not listed in the list. |
| Turkey | Regulation on the Export and Import of Certain Hazardous Chemicals | All components are not listed in the list. |
| Turkey | Regulation of Registration, Evaluation, Authorization, and Restriction of Chemicals (KKDIK) | All components are not listed in the list. |
| China | Inventory of the Existing Chemical Substances in China (IECSC) | All components are listed or exempted. |
| China | Provisions on Environmental Administration of New Chemical Substances | Not listed. |
| China | Regulations on Safe Management of Hazardous Chemicals in China | Not listed. |
| China | Catalog of Hazardous Chemicals | All components are not listed in the list. |
| China | Catalog of Goods Prohibited from Import | All components are not listed in the list. |
| China | Catalog of Goods Prohibited from Export | All components are not listed in the list. |

| | | |
|-------|--|--|
| China | China Inventory of Severely Restricted Toxic Chemicals | All components are not listed in the list. |
|-------|--|--|

SECTION 16: Other Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Edinburgh Genetics Limited and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. ©2023 Edinburgh Genetics Ltd. All rights reserved.

