SAFETY DATA SHEET

***Version**: 1.0* ***Issue Date:** 01-Apr-2026* ***Revision Date:** 01-Apr-2026*

Section 1: Identification

1.1. Product Identifier:

Product Codes: GXBS02021

Product Name: Anti-SARS-CoV-2 RBD Reference Antibody (BD55-5514)

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

Identified use:
Laboratory reagent kit for in vitro quantitative determination of the stated analyte by enzyme-linked immunosorbent assay. Professional laboratory use only, by trained personnel.
Uses advised against: not for diagnostic or therapeutic procedures in humans or animals; not for food, cosmetic or household use; not for administration to humans or animals.

Pure substance/mixture: Mixture

1.3. Details of the supplier of the safety data sheet:
Assay Genie
25 Windsor Place
D02VY42
Dublin 2
Ireland
+353 (01) 8879802

For information about this SDS, please contact: techsupport@assaygenie.com

1.4. Emergency Telephone Number:
Contact the national poisons information centre or emergency service for the country of use.

Europe: A directory of centres is maintained by the European Association of Poisons Centres and Clinical Toxicologists (EAPCCT)
United Kingdom: general public dial 111 (England, Scotland and Wales); healthcare professionals contact the National Poisons Information Service (NPIS)
United States: Poison Help, 1-800-222-1222 (24 hours)
Canada: 1-844-POISON-X / 1-844-764-7669 (24 hours); Québec 1-800-463-5060
Australia: Poisons Information Centre, 13 11 26 (24 hours)
New Zealand: National Poisons Centre, 0800 764 766 (24 hours)
Elsewhere: consult the World Health Organization world directory of poisons centres

Section 2: Hazard(s) Identification

2.1 Classification of the substance or mixture

This mixture is a protein formulation for professional laboratory research use only, formulated with a neutral PBS buffer system. Based on available composition information and toxicological data, the product does not meet the hazard classification criteria under the following currently effective global and regional regulations:

European Union: Regulation (EC) No. 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures (CLP Regulation, as amended by Regulation (EU) 2020/878, the latest fully applicable version in 2026), and Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH Regulation).

United Nations: Globally Harmonized System of Classification and Labelling of Chemicals (GHS), 7th Revised Edition.

United States: Occupational Safety and Health Administration (OSHA) Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012).

The product does not contain hazardous chemicals at a concentration of ≥1% by weight, nor does it contain carcinogens, mutagens or reproductive toxicants (CMR substances), skin sensitizers, persistent bioaccumulative and toxic (PBT) substances, or very persistent and very bioaccumulative (vPvB) substances at or above the classification threshold specified in the above regulations.

Under abnormal operation, improper contact or excessive exposure scenarios, the product may cause mild irritation to the respiratory tract, skin or eyes. Relevant first-aid measures for such scenarios are detailed in Section 4 of this SDS.

2.2 Label Elements

In accordance with the CLP Regulation (EU 2020/878), GHS 7th Revised Edition and OSHA HazCom 2012, the product does not meet the mandatory hazard classification criteria, so statutory hazard labelling is not required for professional laboratory research use scenarios.

For standardized laboratory safety management, it is recommended to mark the product with the supplementary statement: “For Research Use Only. Not for human, veterinary diagnostic or therapeutic use. Avoid direct contact with skin, eyes and respiratory tract.”

2.3 Other Hazards

No other hazards meeting the classification criteria of the above-mentioned effective regulations have been identified. Under improper operation, excessive exposure or non-recommended use scenarios, the product may cause mild transient irritation to the respiratory tract, skin or eyes, which does not reach the mandatory classification threshold of regulatory hazard categories.

Section 3: Composition/ Information on Ingredients

3.1 Substances

This product is a mixture formulated with a protein active component and neutral PBS buffer system; the single pure substance section is not applicable.

3.2 Mixtures

The product is a protein mixture for professional laboratory research use only. The buffer composition may vary slightly between batches but does not affect the hazard classification of the product. Relevant component information is shown in the table below:

Component Name	CAS	Concentration Range	Regulatory Compliance
Protein	—	0.1–1.0 mg/mL	No hazard classification threshold
Sodium chloride	7647-14-5	0.8–0.9% (w/v)	Below 1% hazard classification threshold
Disodium hydrogen phosphate	7558-79-4	0.1–0.2% (w/v)	Below 1% hazard classification threshold
Potassium dihydrogen phosphate	7447-40-5	0.01–0.03% (w/v)	Below 1% hazard classification threshold
Water for injection	7732-18-5	Balance	No hazard classification threshold

Section 4: First-Aid Measures

4.1 Description of first aid measures

General Advice

Consult a doctor and show this safety data sheet.

If Inhaled

Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.

In Case of Skin Contact

Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.

In Case of Eye Contact

Flush with copious amounts of water for at least 15 minutes. Consult a doctor.

If Swallowed

Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed

Not applicable.

4.3 Indication of immediate medical attention and special treatment needed

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Section 5: Fire-Fighting Measures

5.1 Extinguishing Media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
In combustion, may emit toxic fumes.

5.3 Precautions for fire-fighters
Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Do not take action without suitable protective clothing — see Section 8 of this SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors, mist, dust or gas.

6.2 Environmental precautions
Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up
Cover spillage with suitable absorbent material. Hold all material for appropriate disposal as described under Section 13 of this SDS.

6.4 Reference to other sections
For required personal protection equipment see Section 8. For disposal see Section 13.

Section 7: Handling and Storage

7.1 Precautions for safe handling
Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure. Replace the contaminated clothing immediately and wash hands and face after using of the substances.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready to use.

7.3 Specific end use(s)
In addition to use mentioned in Section 1.2, unforeseen other specific end uses.

Section 8: Exposure Controls/Personal Protection

8.1 Control parameters
Components with workplace control parameters
Contains no substances with occupational exposure limit values and biological limit values.

8.2 Exposure controls

Appropriate Engineering Controls

Use in a fume hood where applicable. Ensure all engineering measures described under Section 7 of this SDS are in place. Ensure laboratory is equipped with a safety shower and eye wash station.

Personal Protection Equipment

Eye / Face Protection

Use appropriate safety glasses.

Skin Protection

Use appropriate chemical resistant gloves (minimum requirement use standard BS EN 374:2003). Gloves should be inspected before use. Wash and dry hands thoroughly after handling.

Body Protection

Wear appropriate protective clothing.

Respiratory Protection

If risk assessment indicates necessary, use a suitable respirator.

Environment exposure controls

No data available.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Lyophilized white powder or clear liquid.
Odor	Little to none.
Odor Threshold	No data available.
pH	7.0–7.4
Melting/Freezing Point	No data available.
Boiling Point/Range	No data available.
Flash Point	No data available.
Evaporation Rate	No data available.
Flammability (Solid, Gas)	No data available.
Upper / Lower Flammability Limits	No data available.
Vapor Pressure	No data available.
Vapor Density	No data available.
Relative Density	No data available.
Solubility(ies)	No data available.
Partition Coefficient	No data available.
Autoignition Temperature	No data available.
Decomposition Temperature	No data available.
Viscosity	No data available.
Explosive Properties	No data available.
Oxidizing Properties	No data available.

9.2 Other safety information
No data available.

Section 10: Stability and Reactivity

10.1 Reactivity
Stable under recommended transport or storage conditions.

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4 Conditions to avoid
Heat, moisture.

10.5 Incompatible materials
Strong acids / alkalis, strong oxidizing/reducing agents.

10.6 Hazardous decomposition products
Under recommended conditions of storage and use, hazardous decomposition products should not be produced.

Section 11: Toxicological Information

11.1 Information on toxicological effects
This section is compiled based on toxicological data of the product's core components, in full compliance with the data requirements of the CLP Regulation (EU 2020/878), GHS 7th Revised Edition and OSHA HazCom 2012.

Acute Toxicity
No acute toxicity data available for the target protein; buffer components have no acute toxicity at the formulated concentration, and the classification criteria are not met.

Skin Corrosion / Irritation
No standardized in vivo skin irritation test data available for the target protein; the buffer system is neutral (pH 7.0–7.4) with no skin corrosive or irritant properties. Under prolonged or repeated improper contact, transient mild local irritation may occur, which does not reach the classification threshold of Skin Irritant Category 2 under CLP/GHS, and the classification criteria are not met.

Serious Eye Damage / Irritation
No standardized in vivo eye irritation test data available for the target protein; the buffer system is neutral with no eye damage or serious irritant properties. Under direct contact and insufficient flushing, transient mild redness and irritation may occur, which does not reach the classification threshold of Eye Irritant Category 2 under CLP/GHS, and the classification criteria are not met.

Respiratory or Skin Sensitization
No data indicating that the target protein or buffer components have respiratory or skin sensitization properties; the product does not contain known skin sensitizers at or above the regulatory classification threshold, and the classification criteria are not met.

Germ Cell Mutagenicity
No data indicating mutagenic properties; the product does not contain known germ cell mutagens at or above the regulatory classification threshold, and the classification criteria are not met.
Carcinogenicity
No data indicating carcinogenic properties; the product does not contain known carcinogens at or above the 0.1% (w/w) regulatory classification threshold, and the classification criteria are not met.
Reproductive Toxicity
No data indicating reproductive or developmental toxic properties; the product does not contain known reproductive toxicants at or above the regulatory classification threshold, and the classification criteria are not met.
Specific Target Organ Toxicity (Single/Repeated Exposure)
No data indicating specific target organ toxicity; the classification criteria are not met.
Aspiration Hazard
The product is a lyophilized powder or aqueous solution with low volatility; no aspiration hazard data available, and the classification criteria are not met.
Symptoms / Routes of Exposure
Inhalation: If aerosols or dust are generated and inhaled, transient irritation of the throat and upper respiratory tract, or mild chest tightness may occur.
Skin Contact: Prolonged or repeated contact may cause transient mild local redness or irritation at the contact site.
Eye Contact: Direct splashing contact may cause transient mild redness, tearing and irritation of the conjunctiva.
Ingestion: Accidental ingestion may cause transient irritation of the oral cavity and gastrointestinal tract.
Delayed / Immediate Effects: No known delayed toxic effects under normal recommended use conditions.

11.2 Information on other hazards
Endocrine disrupting properties
No data indicating that the product components have endocrine disrupting properties.
Other information
No other unlisted toxic hazards have been identified under normal recommended use and storage conditions.

Section 12: Ecological Information

12.1 Toxicity: No data available.
12.2 Persistence and degradability: No data available.
12.3 Bioaccumulative potential: No data available.
12.4 Mobility in soil: No data available.
12.5 Results of PBT and vPvB assessment: No data available.
12.6 Endocrine disrupting properties: No data available.
12.7 Other adverse effects: No data available.
12.8 Additional information: None.

Section 13: Disposal Considerations

13.1 Waste treatment methods

Product

Transfer to a suitable container and arrange for collection by specialized disposal company in accordance with national, regional, or local legislation.

Contaminated Packaging

Dispose of in a regulated landfill site or other method for hazardous or toxic wastes in accordance with national, regional, or local legislation.

Section 14: Transport Information

Classified according to the criteria of the UN Model Regulations as reflected in the IMDG Code, ADR, RID, DOT and IATA.

14.1 UN-Number: Not applicable.

14.2 UN proper shipping name: Not applicable.

14.3 Transport hazard class(es): Not applicable.

14.4 Packaging group: Not applicable.

14.5 Environmental hazards: No information available.

14.6 Special precautions for users: No information available.

14.7 IMDG / ADR / RID / DOT-US / IATA: Does not meet the criteria for classification as hazardous for transport.

Section 15: Regulatory Information

This safety data sheet complies with the requirements of Regulation (EC) No. 453/2010, (EU) 2017/542 and (EU) 2020/878.

15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture

TSCA (Toxic Substances Control Act)	Not applicable.
SARA 313	Not applicable.
SARA 311 / 312	Not applicable.
CERCLA Reportable Quantity	Not applicable.
Prop 65	Not applicable.

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been made for this product.

Section 16: Other Information

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This company shall not be held liable for any damage resulting from handling or from contact with the above product. This material must only be handled by suitably qualified, experienced scientists in appropriately equipped and authorized facilities. The above information is believed to be correct but does not purport to be all-inclusive and should be used as a guide only for experienced personnel. Always consult your safety advisor and follow appropriate local and national safety

legislation. The absence of a warning must not, under any circumstances, be taken to mean that no hazard exists.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

****End Of MSDS****