SAFETY DATA SHEET

Cat# BN00658, Ready-to-use IHC kit (Biotin free), One-Step HRP Polymer anti-Mouse, Rat and Rabbit IgG (H+L) with DAB

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Ready-to-use IHC kit (Biotin free), One-Step HRP Polymer anti-Mouse, Rat and Rabbit IgG (H+L) with DAB**

PRODUCT CODES: **Cat# BN00658**

MANUFACTURER: **Assay Genie (brand of Reagent Genie Ltd.)**

ADDRESS: **G1 The Steelworks, Foley Street, Dublin 1**

EMERGENCY PHONE: **+353 1 8879802**

SECTION 2: HAZARDS IDENTIFICATION

Component	Description	Volume	Safety Information
Peroxidase Block	liquid	5 ml	No hazards
Protein Blocking Solution	liquid	5 ml	No hazards
1º antibody dilution buffer	Proprietary Buffer	8 ml	No hazards
HRP-anti mouse/rat/rabbit polymer	Proprietary Buffer	5 ml	No hazards
Reagent BS	liquid	5 ml	No hazards
Reagent C	Clear solution (3,3'-Diaminobenzidine tetrahydrochloride dihydrate)	1 ml	See below

3,3'-Diaminobenzidine :
Emergency Overview: target organs-blood
OSHA Hazards: causes eye and skin irritation. May cause irritation of the digestive tract
Target Organs: blood, skin, eyes
GHS Classification: acute toxicity, oral (category 4)
Eye irritation (Category 2B)
Germ cell mutagenicity (category 2)
Carcinogenicity (Category 1B)
GHS Label elements, including precautionary statements
Pictogram:

Signal word: Danger
Hazard statement(s): H302: Harmful if swallowed
H319: Causes serious eye irritation.
H341: Suspected of causing genetic defects
.H350: May cause cancer
Precautionary statement(s): P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P501 Dispose of contents/ container to an approved waste disposal plant**HMIS Classification**

Health hazard: 2
Chronic health hazard: *
Flammability: 0
Physical hazards: 0

NFPA Rating
Health Hazard: 2
Fire: 0

Reactivity Hazard: 0

Potential Health Effects

Inhalation: Harmful if inhaled or swallowed.
Skin: May be harmful if absorbed through skin. Causes skin irritation.
Eyes: Causes eye irritation.
Ingestion: May be harmful if swallowed.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	EC-No.	amount	Chemical Formula
3,3'-Diaminobenzidine tetrahydrochloride dihydrate	7411-49-6 167684-17-5	231-018-9	10%	(H2N)2C6H3C6H3(NH2)2·4HCl·2H2O

SECTION 4: FIRST AID MEASURES

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact: Wash off with soap and plenty of water. Consult a physician.
In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed: DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

SECTION 5: FIRE-FIGHTING MEASURES

Condition of flammability: Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special protective equipment for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary.
Hazardous combustion products: Hazardous combustion products formed under fire conditions— no data available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods for cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Use explosion-proof equipment. Keep away from sources of ignition (no smoking). Take measures to prevent the buildup of electrostatic charge.
Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place.
Light sensitive; hygroscopic
Recommended storage temperature: -20°C
Containers which are opened must be carefully resealed and kept upright to prevent leakage.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) 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
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	3,3'-Diaminobenzidine
Appearance:	tan powder
pH:	No data available
Water Solubility:	soluble
Boiling Point (°C)	No data available
Melting Point (°C)	300°C
Flash Point (°C)	No data available
Ignition Temp. (°C)	No data available
Density:	No data available

SECTION 10: STABILITY AND REACTIVITY

Property	3,3'-Diaminobenzidine
Chemical Stability:	Stable under recommended storage conditions
Conditions to Avoid:	Heat, flames, sparks, direct sunlight
Materials to Avoid:	Strong oxidizing agents
Hazardous decomposition: products:	Carbon oxides, nitrogen oxides

SECTION 11: TOXICOLOGICAL INFORMATION

SECTION 12: ECOLOGICAL INFORMATION

SECTION 13: DISPOSAL CONSIDERATIONS

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging: Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: REGULATORY INFORMATION

SARA 302 Components: No components are subject to reporting levels established by SARA Title III, Section 302:

SARA 313 Components: Does not contain any components subject to reporting levels established by SARA Title III, Section 313:

SARA 311/312 Hazards: Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components: none
Pennsylvania Right To Know Components:
Biphenyl-3,3',4,4'-tetrayltetraammonium tetrachloride: CAS-No. 7411-49-6
New Jersey Right To Know Components:
Biphenyl-3,3',4,4'-tetrayltetraammonium tetrachloride: CAS-No. 7411-49-6
California Prop. 65 Components: This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: OTHER INFORMATION:

DISCLAIMER:
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. Assay Genie shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.