

SAFETY DATA SHEET

OSHA HCS 2012 & WHMIS 2015 Compliant

SECTION 1: Identification

- Product Name:** VitroView™ LSAB IHC/DAB Kit (Rabbit IgG) (100 Tests)
- Catalog / SKU Number:** VB-6017D
- Manufacturer:** VitroVivo Biotech LLC, 405 E Gude Dr, Suite 214, Rockville, MD 20850, USA
- Recommended Use:** Laboratory chemical for research use only (Immunohistochemistry). Not for human or animal therapeutic or diagnostic use.

SECTION 2: Hazard(s) Identification

The kit contains multiple liquid components. The overall hazard classification is primarily driven by the DAB Stock Solution (40×).

- GHS Classification:** Germ Cell Mutagenicity (Category 2); Carcinogenicity (Category 1B/2); Skin Irritation (Category 2); Eye Irritation (Category 2A)
- Signal Word:** DANGER
- Hazard Statements:** H341: Suspected of causing genetic defects. H350: May cause cancer. H315: Causes skin irritation. H319: Causes serious eye irritation.
- Precautionary Statements (Prevention):** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/clothing/eye protection/face protection. Wash skin thoroughly after handling.
- Precautionary Statements (Response):** IF EXPOSED OR CONCERNED: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention.

SECTION 3: Composition / Information on Ingredients

Component Name	Volume	Major Ingredients / Hazard Drivers	CAS Number	% (w/v or v/v)
RTU Normal Goat Serum	10 ml	Goat Serum; Sodium Azide (preservative)	26628-22-8	< 0.1%
RTU Biotinylated Anti-Rabbit Antibody	10 ml	Ig fraction; Sodium Azide (preservative)	26628-22-8	< 0.1%

RTU Streptavidin-HRP	10 ml	Streptavidin-HRP conjugate; ProClin 300 (No Sodium Azide)	Various	< 0.1%
DAB Stock Solution (40×)	0.75 ml	3,3'-Diaminobenzidine tetrahydrohydrate	868272-85-9	1% – 5%
DAB Buffer	30 ml	Proprietary buffer salts; Hydrogen Peroxide	Mixture	< 0.1%
RTU Hematoxylin Solution	10 ml	Hematoxylin; Aluminum Ammonium Sulfate; Acetic Acid	517-28-2 / 64-19-7	< 1% / < 2%

SECTION 4: First-Aid Measures

- **Inhalation:** Move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
- **Skin Contact:** Wash off immediately with plenty of soap and water for at least 15 minutes. Remove contaminated clothing. Seek medical attention if irritation persists.
- **Eye Contact:** Flush eyes thoroughly with water for at least 15 minutes, holding eyelids open. Remove contact lenses if easy to do. Consult a physician immediately.
- **Ingestion:** Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. Do NOT induce vomiting. Consult a physician.

SECTION 5: Fire-Fighting Measures

- **Suitable Extinguishing Media:** Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
- **Specific Hazards:** Thermal decomposition can lead to the release of toxic and irritating gases (carbon oxides, nitrogen oxides, hydrogen chloride gas).
- **Protective Equipment:** Wear self-contained breathing apparatus (SCBA) and full protective gear for firefighting if necessary.

SECTION 6: Accidental Release Measures

- **Personal Precautions:** Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
- **Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains or surface water.
- **Clean-up Methods:** Soak up with inert absorbent material (e.g., sand, silica gel, acid binder, universal binder). Package in designated, closed disposal containers.

SECTION 7: Handling and Storage

- **Handling:** Avoid contact with skin, eyes, and clothing. Avoid inhalation of vapor or mist. Provide appropriate exhaust ventilation in areas where vapors can accumulate. Do not eat, drink, or smoke when handling.
- **Storage:** Keep container tightly closed in a dry, cool, and well-ventilated place. Recommended storage temperature: 2–8°C. Do not freeze. Store away from incompatible materials.

SECTION 8: Exposure Controls / Personal Protection

- **Exposure Limits:** Contains no substances with occupational exposure limit values at current concentrations. Sodium Azide (in RTU serum/antibody) has an ACGIH TLV ceiling limit of 0.29 mg/m³.
- **Engineering Controls:** Handle in accordance with good industrial hygiene and safety practices. Ensure eyewash stations and safety showers are close to the workstation.
- **PPE:** Safety goggles or face shield (NIOSH/EN 166); chemical-resistant nitrile or latex gloves; protective laboratory coat.

SECTION 9: Physical and Chemical Properties

- **Appearance:** RTU Serum, Antibody, Streptavidin, Buffer: Clear liquids. DAB Stock (40×): Clear, brown to purple liquid. Hematoxylin: Dark purple/red liquid.
- **Odor:** Odorless to slight pungent (due to trace acetic acid in Hematoxylin).
- **pH / Boiling Point:** Component dependent (buffered pH 4.0 - 7.6) / Approximately 100°C.

SECTION 10: Stability and Reactivity

- **Reactivity & Stability:** Stable under recommended storage conditions (2–8°C).
- **Incompatible Materials:** Strong oxidizing agents, strong acids, heavy metals (Sodium azide can react with lead/copper to form explosive azides; note that RTU Streptavidin-HRP does not contain Sodium Azide to preserve HRP activity).
- **Hazardous Decomposition Products:** Formed under fire conditions: Carbon oxides, nitrogen oxides.

SECTION 11: Toxicological Information

- **Acute Toxicity:** Quantitative data not available for the mixture components at usage concentrations.
- **Chronic / Component Effects:** 3,3'-Diaminobenzidine (DAB) is a suspected mutagen (Category 2) and carcinogen (Category 1B/2). Avoid exposure.

SECTION 12: Ecological Information

No specific data available for the kit. Avoid discharge into the environment.

SECTION 13: Disposal Considerations

Dispose of in accordance with local, state, and federal environmental regulations. DAB is a hazardous chemical waste. Do not dispose of via wastewater systems or household trash.

SECTION 14: Transport Information

DOT (US) / IMDG / IATA: Not regulated as dangerous goods for transport. Quantities are below the excepted/limited quantity thresholds for dangerous components.

SECTION 15: Regulatory Information

- **SARA 302/313:** No components exceed reportable de minimis threshold levels.
- **California Proposition 65:** This product contains a chemical known to the State of California to cause cancer (3,3'-Diaminobenzidine).

SECTION 16: Other Information

- **Revision Date:** September 19, 2026
- **Notice:** The RTU Streptavidin-HRP component is verified as formulation-free of Sodium Azide to maintain enzyme activity.