

Biology Diploma Programme-aligned Kits & Experiments

EDVOTEK® is proudly presenting kits and experiments geared toward **International Baccalaureate® (IB) Biology**, a core subject with the *Diploma Programme**.

CORE TOPICS

TOPIC 1 - Cell Biology

- **Eukaryotic Cell Biology**, *Cat. #1001* (1.1)
- **Analysis of Mammalian Cells**, *Cat. #986* (1.1)
- **Principles and Practice of Diffusion and Osmosis**, *Cat. #AP05* (1.4)
- **Mitosis and Meiosis**, *Cat. #AP07* (1.6)

TOPIC 2 - Molecular Biology

- **Purification & Size Determination of Green & Blue Fluorescent Proteins**, *Cat. #255* (2.4)
- **Survey of Protein Diversity**, *Cat. #150* (2.4)
Similar kits are #151, #153, #110, #111.
- **Principles of Enzyme Catalysis**, *Cat. #282* (2.5)
- **Separation of RNA and DNA**, *Cat. #204* (2.6)
- **Drosophila Genotyping Using PCR**, *Cat. #337* (2.7)
Similar kits are #345, #369, #371.
- **Cellular Respiration**, *Cat. #AP06* (2.8)
- **Photosynthesis**, *Cat. #AP05* (2.9)
- **Plant Pigment and Photosynthesis**, *Cat. #284* (2.9)

TOPIC 3 - Genetics

- **ALU Human DNA Typing using PCR**, *Cat. #333* (3.1).
Similar kits are #332, #333, #334, #337, #369.
- **Chromosomal Spread**, *Cat. #987* (3.2)
- **Isolation of E. coli Chromosomal DNA**, *Cat. #203* (3.2)
- **Mitosis and Meiosis**, *Cat. #AP07* (3.3)
- **In Search of my Father**, *Cat. #S-49* (3.4). Similar kit is #314.
- **Identification of Genetically Modified Foods Using PCR**, *Cat. #962* (3.5). Similar kit is #121.
- **Transformation of E. coli with Green Fluorescent Protein** *Cat. #223-AP08* (3.4). Similar kits are #221, #222, #224.

TOPIC 4 - Ecology

- **Dissolved Oxygen and Aquatic Primary Productivity**, *Cat. #292* (4.1)
- **Energy Dynamics**, *Cat. #AP10* (4.2)

TOPIC 5 - Evolution and Biodiversity

- **Photosynthesis**, *Cat. #AP05* (5.1, 5.4)
- **Artificial Selection**, *Cat. #AP01* (5.2)
- **Mathematical Modeling: Hardy-Weinberg**, *Cat. #AP02* (5.2)

TOPIC 6 - Human Physiology

- **Blood Typing**, *Cat. #140* (6.2)
- **AIDS Kit I: Simulation of HIV Detection by ELISA**, *Cat. #271* (6.3). Similar kit is #274.
- **Detecting Risk Factors for Alzheimer's Disease Using Western Blot**, *Cat. #1115* (6.5). Similar kit is #1116.
- **Effects of Alcohol on C. elegans**, *Cat. #851* (6.5). Similar kits are #852, #856.
- **Detecting the Silent Killer: Clinical Diagnosis of Diabetes**, *Cat. #280* (6.6)

TOPIC 7 - Nucleic Acids

- **DNA Fingerprinting using PCR**, *Cat. #371* (7.1)
- **Investigating Synthetic Biology**, *Cat. #331* (7.1, 7.2, 7.3)
- **Reverse Transcription PC: The Molecular Biology of HIV Replication**, *Cat. #335* (7.2)
- **Exploring the Genetics of Taste: SNP Analysis of the PTC Gene using PCR**, *Cat. #345* (7.1, 7.2, 7.3)
- **DNA Model**, *Cat. #1512* (7.1)
- **RNA Protein Synthesis Kit**, *Cat. #1513* (7.2, 7.3)



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TOPIC 8 - Metabolism, Cell Respiration and Photosynthesis

- **Cellular Respiration**, *Cat. #AP06* (2.8)
- **Photosynthesis**, *Cat. #AP05* (2.9)

TOPIC 9 - Plant Biology

- **Transpiration**, *Cat. #AP11* (9.1, 9.2)
- **Introduction to Plant Cell Culture**, *Cat. #908* (9.4)

TOPIC 10 - Genetics and Evolution

- **Mitosis and Meiosis**, *Cat. #AP07* (10.1)
- **In Search of the Cancer Gene**, *Cat. #314* (10.2)
- **Mathematical Modeling: Hardy-Weinberg**, *Cat. #AP02* (10.3)

TOPIC 11 - Animal Physiology

- **Identifying the Epstein Barr Virus Using ELISA**, *Cat. #274* (11.1)

OPTION TOPICS (choice of 1 out of 4)

TOPIC A - Neurobiology and Behavior

- **Scents and Sense-ability**, *Cat. #1100* (A.1, A.2)
- **Cell Types in the Brain**, *Cat. #1110* (A.1, A.2)
- **Detecting Risk Factors for Alzheimer's Disease Using Western Blot**, *Cat. #1115* (A.1, A.2)
- **Researching Alzheimer's Disease by ELISA**, *Cat. #1116* (A.1, A.2)
- **Diagnosing Huntington's Using PCR**, *Cat. #1125* (A.1, A.2)
- **Chemotaxis: The Science of Attraction in *C. elegans***, *Cat. #852* (A.3)

TOPIC B - Biotechnology and Bioinformatics

- **Construction and Cloning of a DNA Recombinant**, *Cat. #301* (B.1)
- **Exploring Biotechnology with GFP**, *Cat. #303* (B.1). Similar kits are #221, #222, #223, #224, #226
- **Fermentation and Bioprocessing of Chromogenic Proteins**, *Cat. #305* (B.1)

- **Investigating Synthetic Biology**, *Cat. #331* (B.1)
- **Identification of Genetically Modified Food Using PCR**, *Cat. #962* (B.2). Similar kit is #121.
- **Bioremediation by Oil Eating Bacteria**, *Cat. #956* (B.3)
- **AIDS Kit I: Simulation of HIV Detection by ELISA**, *Cat. #271* (B.4)
- **Detecting the Silent Killer: Clinical Diagnosis of Diabetes**, *Cat. #280* (B.4)
- **Sickle Cell Gene Detection**, *Cat. #116* (B.4). Similar kits are #115, #118.
- **AIDS Kit III: Simulation of HIV Detection by Protein Electrophoresis**, *Cat. #151* (B.4)
- **Sequencing the Human Genome**, *Cat. #339* (B.5)
- **DNA Bioinformatics**, *Cat. #340* (B.5)

TOPIC C - Ecology and Conservation

- **Environmental Toxicity Response in *C. elegans***, *Cat. #856* (C.3)
- **The Dose Makes the Poison: Testing the Environmental Impacts of Pollution**, *Cat. #905* (C.3)
- **Chromogenic Analysis of Water Contaminants**, *Cat. #951* (C.3). Similar kit is #953.
- **Dissolved Oxygen and Aquatic Primary Productivity**, *Cat. #292* (C.3)
- **Exploring Plant Diversity with DNA Barcoding**, *Cat. #338* (C.4)

TOPIC D - Human Physiology

- **What's In My Lunch? Quantitative Food Allergy ELISA**, *Cat. #266* (D.1)

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The logo for EDVOTEK, featuring the company name in a bold, blue, sans-serif font. To the right of the text is a circular emblem containing a stylized, grey, swirling graphic that resembles a DNA double helix or a molecular structure. The entire logo is set against a white circular background.

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