

VALID ONLY FOR QIHC TESTING DATES BEGINNING FEBRUARY 1, 2026

Examination Format

The American Society for Clinical Pathology Board of Certification (ASCP BOC) QIHC qualification examination is composed of 50 questions given in a 90-minute time frame. All examination questions are multiple-choice with one best answer. More information is available on the ASCP BOC website.

The examination questions may be both theoretical and/or procedural. Theoretical questions measure skills necessary to apply knowledge, calculate results, and correlate reactions/patient results to histology. Procedural questions measure skills necessary to select/perform appropriate laboratory methods, evaluate laboratory reactions/results, and follow quality assurance protocols.

Examination Content Areas

The examination questions encompass the following content areas within immunohistochemistry. Each of these content areas comprises a specific percentage of the overall 50-question examination.

Content Area	Examination Percentage
Detection Systems	20 – 25%
Specimen Handling	10 – 15%
Epitope Enhancement (Antigen Retrieval)	10 – 15%
Staining	30 – 40%
Laboratory Operations	15 – 20%

Examination Topic Outline

- Regulatory questions on the examination are based on U.S. sources (e.g., AABB, FDA, CLIA, etc.).
- The examples provided in this topic outline (as indicated by e.g.,) are not limited to those listed.

I. Detection Systems

20 – 25% of total examination

- A. Immunofluorescence
- B. Immunohistochemistry and *in situ* Hybridization
 - Substrates
 - Enzymes
 - Chromogens
 - Blocking reactions
 - Polymer/multimer detection
 - Amplification systems

II. Specimen Handling

10 – 15% of total examination

- A. Fixation
- B. Processing
- C. Microtomy/Slide Preparation
- D. Cytology Specimens
- E. Immunofluorescence Specimens
- F. Frozen Sections

III. Epitope Enhancement (Antigen Retrieval)

10 – 15% of total examination

- A. Methods, Principles, and Techniques
 - Heat-induced epitope retrieval
 - Enzyme-induced epitope retrieval
 - Combined heat and enzyme methods

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IV. Staining

30 – 40% of total examination

A. Principles, Mechanisms, and General Immunology

1. Direct
2. Indirect
3. Avidin-biotin
4. Multimer/polymer
5. Intensification/amplification systems
6. *In situ* hybridization (FISH, CISH, SISH)
7. Antigens
8. Antibodies (monoclonal, polyclonal, structure, classes)

B. Tissues

1. Morphology/anatomy
2. Cell/component demonstration
 - a. Staining patterns
 - b. Microorganisms
3. Basic concepts in pathology

C. Stain Components/Characteristics

1. Concentrated antibody
2. Pre-diluted antibody
3. Lyophilized antibody
4. Diluents
5. Titrations
6. Reagents

D. Troubleshooting

E. Mounting Procedures

F. Preliminary Screening

V. Laboratory Operations

15 – 20% of total examination

A. Quality Control/Quality Assurance

1. Documentation
 - a. Procedures
 - b. Quality control records
 - c. Personnel
 - d. Reagents/antibody lots
2. Selection, utilization, and evaluation of control tissue
3. Slide storage
4. Method selection, optimization, and validation
5. Troubleshooting

B. Safety

1. Storage
2. Disposal
3. Hazards
4. Regulations
5. Procedures

C. Laboratory Mathematics

D. Ancillary Equipment/Instruments (e.g., microwave, computers, pH meter, solvent recovery, hybridization chamber)

E. Regulations

1. Federal government
2. Accrediting agencies

END OF TOPIC OUTLINE