PATHOSAGE
Trusted Results

Hydrophilic Microscope Slides (45°)

Rev: 2025-02-2/1
IFU: PSM-ACF2004

Hydrophilic	Availability	REF	Volume
		PSM-ACF2004U-0050	50 pcs/box
		PSM-ACF2004U-0072	72 pcs/box
		PSM-ACF2004U-0100	100 pcs/box

Intended use

Hydrophilic adhesion slides effectively prevent tissues from detaching from the slides during high-temperature antigen retrieval or enzyme digestion procedures. These slides are ideal for tissues requiring strong adhesion, thanks to their hydrophilic surface, which ensures an even distribution of water-based reagents. This improves staining quality, reduces false negatives, and minimizes background staining. By promoting uniform reagent coverage, hydrophilic slides enhance sample quality, leading to consistent and high-quality staining results, making it easier for pathologists and researchers to analyze samples accurately.

Specification

Glass material: super white glass frosted one end, one side
Bond: Hydrogen bounds & dipole interaction (non-covalent)
Dimensions: 75x25x1mm
Color: Sage Green
Corner: 45°
Packaging: 50,72,100 pcs/box
Recommended for manual IHC staining, automatic IHC staining
Ideal for use in H&E staining for routine and frozen sections like fat section, brain section and bone section where require stronger adhesion
Recommend for thermal transfer printer, Inkjet printer, laser printer and permanent marker

Materials Provided

Hydrophilic Microscope Slides (45°)

Materials Required but not Provided

The following materials are required but are not provided:
1- Slide Staining Jar & Basket
2- Coplin Staining Jar
3- Slide Dispenser
4- IHC Pen

Storage and Stability

Storage

- Protect the bottom of the carton from dampness.
- Keep dry.
- Avoid large variations in temperature during both storage and usage. Cooling of the product can cause condensation and lead to condensed water forming between the glasses.
- Slide storage periods is best use befor expire date.

Stability and Reactivity

Hydrolytic Resistance: Hydrolytic Class-HGB3 (ISO 719 or GB/T 6582)
Acid Resistance: Acid Class-H2 (DIN 116 12 or GB/T 15728)
Alkali Resistance: Alkali Class-A2 (DIN ISO 695 or GB/T 6580)
Hazardous Decomposition: Stable
Materials to Avoid: Strong Hot Alkali Solutions (Hydrofluoric, Fluosilicic and Phosphoric)

Warnings and Precautions

1. Slides and cover glasses are ready to use and should not be reused.
2. Be aware of the possibility of harm when dealing with the slides and cover glasses, and take the corresponding safety measures, e.g. wearing gloves.
3. When using the slides and cover glasses in machines, the additional usage instructions from the manufacturer of the machinery should be followed.
4. When using dyes or other chemicals, please note the safety advice from the manufacturer.

General Limitations

Immunohistochemistry (IHC) is a powerful tool in pathology and research, but it has inherent limitations that must be considered for accurate interpretation. Key limitations include:

1. Sample Collection and Fixation Issues
   Delayed Fixation: If tissue is not fixed promptly (e.g., in formalin), protein degradation can occur, leading to antigen loss.
   Overfixation: Prolonged fixation may mask epitopes, reducing antibody binding and causing false negatives.
   Fixative Type: Some fixatives (e.g., alcohol) may not be suitable for certain antigens.
2. Antibody-Related Limitations
   Low Specificity: Antibodies may exhibit cross-reactivity, binding non-target proteins and causing false positives.
   Variable Sensitivity: Weak antigen expression may go undetected if the antibody lacks sufficient sensitivity.
   Optimization Required: Antibody concentration, incubation time, and antigen retrieval methods (e.g., heat-induced or enzymatic) need optimization for each target.
3. Tissue Processing Artifacts
   Paraffin Embedding Issues: Tissue shrinkage, folding, or loss during sectioning can affect staining quality.
   Incomplete Dehydration: Poor processing may lead to uneven staining or high background noise.
4. Staining and Detection Challenges
   Non-Specific Background: Endogenous enzymes (e.g., peroxidase) or endogenous biotin can cause false signals.
   Weak or Faded Staining: Over-washing or improper chromogen/substrate use may reduce signal intensity.
   Fluorescence Quenching: Fluorophore-labeled antibodies may fade under prolonged light exposure.
5. Interpretation and Reproducibility
   Subjectivity in Scoring: Semi-quantitative results (e.g., 3/+2/+1/0+) depend on the observer's experience.
   Batch-to-Batch Variability: Differences in antibody lots or staining protocols can affect reproducibility
   Tissue Heterogeneity: Uneven antigen distribution may lead to sampling bias.

LABEL AND BOX SYMBOLS

Explanation of the symbols of the product label and box:

	Color		Refer to the instraction of use		Keep Dry
	Degree		Disposable		Fragile