PATHOSAGE
Trusted Results

Positive Charged Microscope Slides (90°)

Rev: 2025-02-2/1
IFU: PSM-ACF2002

Positive Charged		REF	Volume
	Availability	PSM-ACF2002U-0050	50 pcs/box
		PSM-ACF2002U-0072	72 pcs/box
		PSM-ACF2002U-0100	100 pcs/box

Intended use

Through a new process, positive-charged microscope slides provide several advanced benefits. These slides generate a permanent positive charge, electrostatically attracting frozen tissue sections and cytology preparations, effectively binding them to the slide. They form a bridge that encourages covalent bonds to develop between formalin-fixed sections and the glass. This enhances adhesion of tissue sections and cytological preparations to the positive charge glass slides, eliminating the need for special adhesives or protein coatings for better adherence.

Specification

Glass material: super white glass frosted one end, one side
Bond: Electrostatic bond
Dimensions: 75x25x1mm
Color: Imperial Blue
Corner: 90°
Packaging: 50,72,100 pcs/box
Recommended for routine H&E stains, IHC, ISH, frozen sections, cytology smear
Compatible with thermal transfer printer, Inkjet printer, laser printer and permanent marker

Materials Provided

Positive Charged Microscope Slides (90°)

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