# **PSAP**

Clone: PASE/4LJ Mouse Monoclonal







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Inset: IHC of PSAP on a FFPE Prostate Tissue

## **Intended Use**

For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalinfixed paraffin-embedded tissues (FFPE), frozen tissue sections and cell preparations. Interpretation of results should be performed by a qualified medical professional.

## **Immunogen**

Purified prostatic acid phosphate from human seminal plasma.

## **Summary and Explanation**

Prostatic specific acid phosphatase (PSAP) is an enzyme produced by the prostate. It may be found in increased amounts in men who have prostate cancer or other diseases. The highest levels of acid phosphatase are found in metastasized prostate cancer. Diseases of the bone, such as Paget's disease or hyperparathyroidism, diseases of blood cells (such as Sickle-Cell Disease), Multiple Myeloma or Lysosomal Storage Diseases (such as Gaucher's disease), will show moderately increased levels. Certain medications can cause temporary increases or decreases in acid phosphatase levels. Manipulation of the prostate gland through massage, biopsy or rectal exam before a test may increase the levels of PSAP.

This antibody reacts with prostatic specific acid phosphatase in the glandular epithelium of the normal and Hyperplastic Prostate, Carcinoma of the prostate and metastatic cells of Prostatic Carcinoma. This marker may be helpful in pinpointing the site of origin in cases of Metastatic Carcinoma of the prostate, and is considered a more sensitive marker than PSA. However, it also offers less specificity.

Antibody Type	Mouse Monoclonal	Clone	PASE/4LJ
Isotype	lgG1	Reactivity	Paraffin, Frozen
Localization	Cytoplasmic	Control	Prostate
	Species Reactivity	Human	

## **Precautions**

- 1. For professional users only. Results should be interpreted by a qualified medical
- 2. This product contains <0.1% sodium azide (NaN<sub>3</sub>) as a preservative. Ensure proper handling procedures are used with this reagent.
- 3. Always wear personal protective equipment such as laboratory coat, goggles and gloves when handling reagents.
- 4. Dispose of unused solution with copious amount of water.
- 5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
- 6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
- 7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
- 8. For additional safety information refer to Safety Data Sheet for this product.
- 9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

## **Presentation**

PSAP is a mouse monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog No.	Antibody Type	Dilution	Volume/Qty	
BSB 5903	Tinto Prediluted	Ready-to-Use	3.0 mL	
BSB 5904	Tinto Prediluted	Ready-to-Use	7.0 mL	
BSB 5905	Tinto Prediluted	Ready-to-Use	15.0 mL	
BSB 5906	Concentrated	1:250 - 1:1000	0.1 mL	
BSB 5907	Concentrated	1:250 - 1:1000	0.5 mL	
BSB 5908	Concentrated	1:250 - 1:1000	1.0 mL	

## **Control Slides Available**

Catalog No.	Quantity		
BSB 5909	5 slides		

**Storage** Store at 2-8°C (Control Slides: Store at 20-25°C)

## **Stability**

This product is stable up to the expiration date on the product label. Do not use after expiration date listed on package label. Temperature fluctuations should be avoided. Store appropriately when not in use, and avoid prolonged exposure to room temperature conditions.

## **Specimen Preparation**

**Paraffin sections:** The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033) or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

Frozen sections and cell preparations: The antibody can be used for labeling acetone-fixed frozen sections and acetone-fixed cell preparations.

## **Staining Procedure**

- 1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
- 2. Air dry for 2 hours at 58° C.
- 3. Deparaffinize, dehydrate and rehydrate tissues.
- 4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
- 5. Any of three heating methods may be used:

## a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA, and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

#### b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

#### c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

- 6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
- 7. For manual staining, perform antibody incubation at ambient temperature. For automated staining methods, perform antibody incubation according to instrument manufacturer's instructions.
- 8. Wash slides with ImmunoDNA washer or DI water.
- 9. Continue IHC staining protocol. Wash slides between each step with ImmunoDNA washer solution.

#### Abbreviated Immunohistochemical Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP	
Peroxidase/AP Blocker	5 min.	5 min.	5 min	
Primary Antibody	30-60 min.	30-60 min.	30-60 min.	
1st Step Detection	10 min.	30-45 min.	15 min.	
2nd Step Detection	10 min.	Not Applicable	15 min.	
Substrate-Chromogen	5-10 min.	5-10 min.	5-10 min.	
Counterstain / Coverslip	Varies	Varies	Varies	

## **Performance Characteristics**

Normal Tissues						
Positive (+)						
Prostate glandular epithelium	Pancreas islet cells 4/9					
Fetal Kidney 10/10 (Loops	of Henle, maculae densae, distal tubules)					
Adult Kidney 2/9 (Loops	of Henle, maculae densae, distal tubules)					
Nega	Negative (-)					
Smooth muscle	Genitourinary system					
Lymphoid system	Musculoskeletal system					
Nervous system	Cardiovascular system					
Respiratory system	Endocrine system					
Placenta	Umbilical cord					
Abnormal Tissues						
Posi	tive (+)					
Benign prostate 12/12	Prostate cancer 32/32					
Carcinoids 6/36	Carcinosarcoma 1/1					
Nega	ntive (-)					
Ovarian adenocarcinoma 1/55	Urinary tract tumors 0/22					
Genital tract tumors 0/78	Islet cell tumor 1/9					
Endocrine tumors 0/62	Carcinoids 0/30					
Bone, muscle, soft tumors 0/38	Breast tumors 0/32					
Gastrointestinal tumors tract 0/44	Respiratory tract tumors 0/36					
Lymphoid tumors 0/17	Skin tumors 0/16					
Nervous system tumors 0/18						

## **Mounting Protocols**

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to Pl0174 or Pl0097.

## **Product Limitations**

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

## References

- 1. Ansari MA, et al. Am J Clin Path. 1981;76:94-98
- 2. Nadji M, Morales AR, Ann NY, Acad Sci.1982;390:133-141
- 3. Kimura N, et al. Virchows Arch A. 1986;4:247-251
- 4. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement / Vol. 61, January 6, 2012.

Symbol Key / Légende des symboles/Erläuterung der Symbole

EC RI	EMERGO EUROPE Prinsessegracht 20 2514 AP The Hague The Netherlands	2°C 3°C	Storage Temperature Limites de température Zulässiger Temperaturbereich		Manufacturer Fabricant Hersteller	REF	Catalog Number Référence du catalogue Bestellnummer
IVD	In Vitro Diagnostic Medical Device Dispositif médical de diagnostic in vitro In-Vitro-Diagnostikum	[]i	Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten	$\subseteq$	Expiration Date Utiliser jusque Verwendbar bis	LOT	Lot Number Code du lot Chargenbezeichnung

