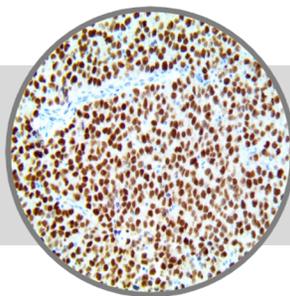


PRAME, RMAb

Clone: RBT-PRAME

Rabbit Monoclonal

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Inset: IHC PRAME on a FFPE Seminoma Tissue

Intended Use

For Research Use Only

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

Immunogen

Synthetic peptide corresponding to residues of human PRAME protein.

Summary and Explanation

Melanoma antigen preferentially expressed in tumors is a protein that in humans is encoded by the *PRAME* gene. This gene encodes an antigen that is predominantly expressed in human melanomas and that is recognized by cytolytic T lymphocytes. It is not expressed in normal tissues, except in testis. This expression pattern is like that of other CT antigens, such as MAGE, BAGE and GAGE. However, unlike these other CT antigens, this gene is also expressed in acute leukemias. PRAME overexpression in triple negative breast cancer has also been found to promote cancer cell motility through induction of the epithelial-to-mesenchymal transition.

PRAME mRNA expression is well documented in cutaneous and ocular melanomas. One study concluded that diffuse nuclear immunoreactivity for PRAME was found in 87% of metastatic and 83.2% of primary melanomas. Among melanoma subtypes, PRAME was diffusely expressed in 94.4% of acral melanomas, 92.5% of superficial spreading melanomas, 90% of nodular melanomas, 88.6% of lentigo maligna melanomas, and 35% of desmoplastic melanomas. When in situ and nondesmoplastic invasive melanoma components were present, PRAME expression was seen in both. Most Melanocytic nevi (86.4%), were completely negative for PRAME. Immunoreactivity for PRAME was seen, albeit usually only in a minor subpopulation of lesional melanocytes, in 13.6% of cutaneous nevi, including dysplastic nevi, common acquired nevi, traumatized/recurrent nevi, and Spitz nevi. Rare isolated junctional melanocytes with immunoreactivity for PRAME were also seen in solar lentigines and benign nonlesional skin. This study suggests that immunohistochemical analysis for PRAME expression may be useful for diagnostic purposes to support a suspected diagnosis of melanoma. It may also be valuable for margin assessment of a known PRAME-positive melanoma, but its expression in nevi, solar lentigines, and benign nonlesional skin can represent a challenge.

Antibody Type	Rabbit Monoclonal	Clone	RBT-PRAME
Isotype	IgG	Reactivity	Paraffin, Frozen
Localization	Cytoplasmic, Nuclear	Control	Tonsil, Testis, Seminoma
Species Reactivity		Human	

Presentation

Anti-PRAME is a rabbit 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-2374-3	Tinto Predilute	Ready-to-Use	3.0 mL
BSB-2374-7	Tinto Predilute	Ready-to-Use	7.0 mL
BSB-2374-15	Tinto Predilute	Ready-to-Use	15.0 mL
BSB-2374-01	Concentrate	1:50 - 1:200	0.1 mL
BSB-2374-05	Concentrate	1:50 - 1:200	0.5 mL
BSB-2374-1	Concentrate	1:50 - 1:200	1.0 mL

Control Slides Available

Catalog No.	Quantity
BSB-2374-CS	5 slides

Precautions

1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN₃) 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).

Storage Store at 2-8°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

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMunter (BSB 0169-0174) or organic solvent-based resin such as PermaMunter (BSB 0094-0097), refer to PI0174 or PI0097.

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 using positive and negative controls. Results should be interpreted by a qualified medical professional.

References

1. "Entrez Gene: PRAME preferentially expressed antigen in melanoma": <https://www.ncbi.nlm.nih.gov/gene?Db=gene&Cmd=ShowDetailView&TermToSearch=23532>
2. Al-Khadairi G, et al. "PRAME promotes epithelial-to-mesenchymal transition in triple negative breast cancer". Journal of Translational Medicine. 2019; 17 (1): 9.
3. Lezcano C, et al. PRAME Expression in Melanocytic Tumors. Am J Surg Pathol. 2018 Nov; 42(11): 1456-1465.
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

	Storage Temperature Limites de température Zulässiger Temperaturbereich		Manufacturer Fabricant Hersteller	REF	Catalog Number Référence du catalogue Bestellnummer
	Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten		Expiration Date Utiliser jusqu'à Verwendbar bis	LOT	Lot Number Code du lot Chargenbezeichnung



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