## Bioscience for the world

# TintoFast AndrogenReceptorC € IVD

Clone: BSB-4



Inset: IHC of TintoFast Androgen Receptor on a FFPE Melanoma Tissue Intended Use

For Mohs In Vitro Diagnostic Use.

This antibody is intended for the fast immunohistochemical detection of androgen receptors during intraoperative Mohs surgery on frozen sections. Additionally, this antibody can also be used on FFPE specimens. Interpretation of results should be performed by a qualified medical professional.

#### Immunogen

A synthetic peptide corresponding to residues in the N-terminus of human Androgen Receptor protein.

#### **Summary and Explanation**

The androgen receptor (AR) is a type of nuclear receptor which is activated by binding of either of the androgenic hormones testosterone or dihydrotestosterone. The main function of the androgen receptor is as a DNA-binding transcription factor which regulates gene expression. However, the androgen receptor has additional functions independent of DNA binding. The AR signaling pathway plays a key role in development and function of male reproductive organs, including the prostate and epididymis. AR also plays a role in nonreproductive organs, such as muscle, hair follicles, and the brain.

This antibody reacts with the androgen receptor and also with the newly-described A form of the receptor. This antibody does not cross-react with estrogen, progesterone or glucocorticoid receptors. Abnormalities in the AR-signaling pathway have been linked to a number of diseases, including Prostate Cancer, Kennedy's Disease and male infertility.

Antibody Type	Mouse	Clone	BSB-4		
	Monoclonal				
lsotype	lgG1	Reactivity	Paraffin, Frozen		
Localization	Nuclear	Control	Prostate, Prostatic Adenocarcinoma		
Species Reactivity		Human			

#### Presentation

Anti-TintoFast Androgen Receptor 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-3690-3	TintoFast Predilute	Ready-to-Use	3.0 mL
BSB-3690-7	TintoFast Predilute	Ready-to-Use	7.0 mL
BSB-3690-15	TintoFast Predilute	Ready-to-Use	15.0 mL

#### **Control Slides Available**

Catalog No.	Quantity		
BSB-3690-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 (NaN<sub>3</sub>) as a preservative. Ensure proper handling procedures are used with this reagent.

3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.

4. Dispose of unused solution with copious amounts 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 (BSB 7008), TintoDetector Incubator (BSB 7002) or similar.

 For additional safety information refer to Safety Data Sheet for this product.
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).

#### Stability

#### This product is stable up to the expiration date on the product label.

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

#### Mohs IHC Protocol

#### **Specimen Preparation of Mohs Frozen Tissues**

1. Embed the specimen in OCT inside a cryostat.

2. Cut sections at 4-5  $\mu m$  and mount on a positively charged glass slide such as the Bio SB Hydrophilic Plus Slides (BSB 7028) or TintoDetector Cap Gap slides (BSB 7006).

3. Air dry the slide at room temperature for 2 minutes and then incubate the slide at 60 °C for 3 minutes in an incubator or dry bath.

4. Fix in 100% acetone or 10% NBF for 2 minutes at room temperature. Choice of fixation solution depends on antibody.

5. If tissue is fixed in 100% acetone, let the slide air dry. If the tissue is fixed in 10% NBF, rinse with distilled water and then dry dry the slides for 2 minutes at room temperature.

#### **Tissue Pretreatment Procedure for Mohs Frozen Tissues**

1. Subject tissues to HIER (heat-induced epitope retrieval) using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023). Optionally, Mohs Immuno Digestor (BSB 0108-0112) can be used for cytokeratin targets instead of HIER.

a. For Mohs PolyDetector HRP Green or DAB protocol use the TintoRetriever Pressure Cooker (BSB 7008) or Equivalent. Place

tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate, and place on trivet or staining dish support in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high (110-121° C). Incubate for 5 minutes. Open and immediately transfer slides to room temperature. Cool off for 5 -10 min

### b. For Mohs PolyDetector Plus HRP Green or DAB protocol use the

**TintoDetector Incubator (BSB 7002).** Preheat the TintoDetector Incubator to 110 °C. Place TintoDetector Cap Gap slides (BSB 7006) face to face and insert them into the TintoDetector Slide Holder (BSB 7003). Submerge slides in ImmunoDNA Retriever with Citrate to draw up enough solution by capillary action to cover the tissues. Heat the slides in a preheated TintoDetector Incubator for 3 minutes. Transfer slides to room temperature and cool off for 1 min.

#### c. For targets that are compatible with Mohs Immuno Digestor,

Incubate with Mohs ImmunoDigestor at room temperature for 1 min and rinse the slides with ImmunoDNA washer (BSB 0029 & BSB 0042) after 1 min.

#### **Mohs IHC Detection**

1. After HIER, transfer slides to ImmunoDNA washer and let it stand for 1-2 minutes.

2. For manual staining, perform antibody incubation at ambient temperature. For automated staining methods, perform antibody incubation according to instrument manufacturer's instructions.

3. Wash slides with ImmunoDNA washer or DI water.

4. Continue IHC detection protocol. Wash slides between each step with ImmunoDNA washer solution.

#### Abbreviated Mohs Immunohistochemical Protocol

Step	Mohs PolyDetector HRP Green or DAB 10 min* Protocol	Mohs PolyDetecto Plus HRP Green or DAB 20 min Protocol
HIER	5 min**	3 min
Primary Antibody	4 min.	5 min.
1st Step Detection	3 min.	4 mn.
2nd Step Detection	NA.	4 min.
Substrate- Chromogen	2 min.	1-2 min.
Counterstain / Coverslip	Varies	Varies

\*Instrument setup and HIER time not included

\*\*1 min PIER for compatible targets

#### **IHC Protocol for FFPE Tissues**

 Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides.
Air dry for 2 hours at 58° C.

#### **Tissue Pretreatment Procedure for FFPE Tissues**

1. Deparaffinize, dehydrate, and rehydrate tissues.

2. Subject tissues to HIER using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate or EDTA.

3. 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 10- 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 20-30 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 20-30 minutes.

6. After HIER, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 10 minutes.

7. For manual IHC, perform antibody incubation at ambient temperature. For automated IHC methods, perform antibody incubation according to instrument manufacturer's instructions.

8. Wash slides with ImmunoDNA washer or DI water.

9. Continue IHC protocol. Wash slides between each step with ImmunoDNA washer solution.

#### **Mounting Protocols**

Mount with aqueous media such as AquaMounter (BSB-0090- BSB 0093) or permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent-based resin such as PermaMounter (BSB 0094-0097).

#### **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. Yu Z, et al. J. Clin. Invest. 2006:116(10):2663-72
- 2. Jänne OA, et al. Ann Med. 1993;25:83
- 3. Horie K, et al. Hum Reproduct. 1992:7(10):1461
- 4. Nakada SY, et al. Canc Res. 1993:53:1967

5. 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

Symbol Rey / Legende des Symboles/Enauterung der Symbole							
EC RE	QAdvis EAR AB Ideon Science Park Scheelevägen 17 SE-223 70 Lund, Sweden	4	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	(ii)	Read Instructions for Use Consulter les instructions d'utilisation ebrauchsanweisung beachten	$\square$	Expiration Date Utiliser jusque Verwendbar bis	LOT	Lot Number Code du lot Chargenbezeichnung
Bio SBQ D							

5385 Hollister Avenue, Bidg. 8, Ste. 108 Santa Barbara, CA 93111, USA Tel. (805) 692-2768 | Tel. (800) 561-1145 | Fax. (805) 692-2769 E-mail: sales@biosb.com | Website: www.biosb.com