



# CD38 Control Slides





# **Intended Use**

For In Vitro Diagnostic Use.

# **Summary and Explanation**

CD38 is a glycoprotein found on the surface of many immune cells (white blood cells), including CD4+, CD8+, B and natural killer cells. It is a marker of cell activation. The CD38 protein has been linked to HIV infection, Leukemias, Myelomas, solid tumors, Type II Diabetes Mellitus and bone metabolism, as well as some genetically-determined conditions. It has also been used as a prognostic marker in Leukemia. CD38 is highly expressed on thymocytes. It is also expressed by early cells of B and T lineages, NK cells, plasma cells, monocytes and macrophages, and may be detected on cells from Multiple Myeloma, ALL (B and T) and some acute myeloid leukemia.

Monoclonal antibodies to CD38 have been shown to be useful in subtyping of Lymphomas and Leukemias, inhibition of B-lymphopoiesis, detection of plasma cells, protection of B-cells from apoptosis, and as a marker for activated B and T-cell proliferation.

## Presentation

Five slides of CD38 positive tissues, each mounted on Hydrophilic Plus Slides, provided in a plastic mailer.

Catalog No.	Quantity			
BSB-9089-CS	5 slides			
BSB 6204	5 slides			
BSB 6505	5 slides			

# Storage Store at 20-25°C

## **Precautions**

- 1. For professional users only. Results should be interpreted by a qualified medical professional.
- 2. 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. 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).

# **Stability**

This product is stable up to the expiration date on the product label. Do not use after expiration date listed on package label.

## IHC Protocol

- 1. 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).
- 2. 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.

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

#### Abbreviated Immunohistochemical Protocol

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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					

## Abbreviated IF Protocol

Appreviated in Trotocot					
Step	Incubation Time				
Rinse slides in IF wash buffer	5 minutes				
Drain and wipe excess IF wash buffer off slide					
Conduct remaining steps in the dark					
Apply Antibody	30-60 minutes				
Rinse with 3 changes of IF wash buffer	3x15 minutes each				
Coverslip with IF mounting medium					

# **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 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 through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

# References

- 1. Funaro A, Malavasi F, J. Biol. Regul. Homeost. Agents. 1999;13(1):54-61
- 2. Mallone R, Perin PC, Diabetes Metab. Res. Rev. 2006;22(4):284-94
- 3. Partida-Sanchez S, et al. Adv. Exp. Med. Biol. 2007;590:171-83
- 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. https://www.cdc.gov/mmwr/pdf/other/su6101.pdf

Symbol Key / Légende des symboles/Erläuterung der Symbole

EC REF	QAdvis EAR AB Ideon Science Park Scheelevägen 17 SE-223 70 Lund, Sweden		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

