

Cell Control Array Virus

REF / Cat. No.: MB-CC VIR

Instructions for use

Intended use

The block Cell Control Array Virus is designed for the qualitative control of immunochemical stainings and *in situ* hybridisation of virus infected tissue. It is intended to ensure a "Yes" or "NO" answer for the particular staining. The array contains cell lines infected with CMV, HSV type 1 and type 2, EBV and Polyomavirus/SV40. It is intended for research use only.

Summary and Explanation

Cell line cores of CMV, HSV type 1 and type 2, EBV and Polyomavirus/SV40 infected cell lines and a heart muscle core were included into one paraffin block. Staining of the cores allows for a general control of the staining method for the respective types of virus. The cell line cores show different reactions after immunohistochemistry. Depending on the stage in cell cycle virus infected cells express different virus-related epitopes. Therefore only fractions of the embedded cells can show a positive staining result.

In addition, the control block can be used for *in situ* hybridisation.

The cells were fixed in neutrally buffered formalin, for 12-18 h and embedded in paraffin. The paraffin has a pink dye to facilitate cutting of sections. The core of heart muscle serves for easy orientation.

The small size of the control block sections allows for simultaneous mounting of patient material sections and control block sections on the same slide. Thus, you will have an on-slide control array staining (OSCAR) proving a regular stain even after years of storage.

Reagents provided

REF / Cat. No. MB-CC Virus

1 Block Cell Control Array Virus

Storage and handling

The block should be stored in a dry place at +4° to +25°C. Avoid freezing below -15° as the block may crack. Please insert the block in the microtome with caution because otherwise it also may crack.

The sections (3-5 µm) should be mounted on adhesive slides and dried at 37°C over night or for 2 h at 65°C. Sections used for *in situ* hybridization should be cut at 5-7 µm. Provided that the block is regularly cut at least 100 sections can be made from one block; usually one block is good for 130-170 sections. The number of sections depends on the frequency of cutting and the thickness of the sections.

Sections can be stored up to 6 weeks, although we suggest using freshly prepared sections.

The cell line cores are covered with a thin paraffin layer due to production technique. As soon as the paraffin layer is cut away at all cell line cores the sections are ready for use.

Each cell line core is approximately 2 mm high. A core of heart muscle tissue is included in the block to ensure easy orientation.

Precautions

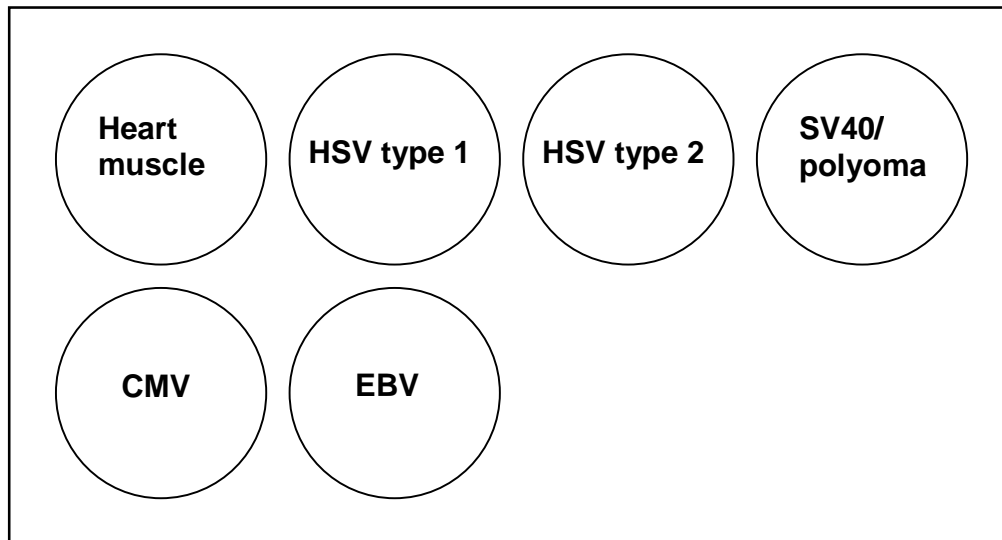
Use by qualified personnel only.

Health hazards should not be expected. However, the block should be handled as potential infectious formalin fixed paraffin embedded human tissue. Wear proper protection clothing.

A Material safety data sheet (MSDS) is available upon request.

Expected results

The localization and evaluation pattern of the different types of viruses is shown in the figure below. The different cell lines replicate the viruses in different amounts. Therefore the intensity of immunohistochemical staining and percentage of positive cells can be different.



Troubleshooting

If you observe unusual staining or other deviations from the expected results which could possibly be caused by the product, please read these instructions carefully, contact Zytomed Systems' technical support or your local distributor.

Limitations of the procedure

A large number of factors can considerably influence the staining results e.g. thickness of sections, temperature during drying process, storage time of sections or staining reagents.

Depending on the stage in cell cycle virus infected cells express different virus-related epitopes (e.g. EBV-LMP, EBER, EBNA). Thus depending on the target of the respective detection system only fractions of the embedded cells can show a positive staining result.

Cross reactivity of HSV type 1 and HSV type 2 was described when using immunostaining and PCR based techniques. Cross reactivity has also been described in *in situ*-hybridisations with HSV probes of different manufacturers.

This cross reactivity can also be observed in tissue specimen and depends on the specificity of the probes and hybridisation conditions (stringent wash step) used for *in situ*-hybridisation. Please refer to the respective datasheet of the manufacturer.

Zytomed Systems guarantees that the product will meet all requirements described from its shipping date until its expiry date, as long as the product is correctly stored and utilized. No additional guarantees can be given. Under no circumstances shall Zytomed System be liable for any damages arising out of the use of the reagent provided.

Performance characteristics

Zytomed Systems has conducted studies to evaluate the performance of the product. The product has been found to be suitable for the intended use.

Reference

- Dabbs D Immunohistochemistry, Elsevier 2006 ISBN 0-443-06652-3
 WHO Meeting, Prevention and control of herpesvirus diseases, Bull World Health Organ. 63:185-201, 1985
 Gluzman Y, Cell 23:175-82, 1981
 Steininger C, Clin Microbiol Infect 13:953-63, 2007
 Kessler HH, Heyszl S, Methods Mol Biol 665:101-121, 2011
 Gulley M, J Mol Diag Vol. 3, Feb 2001

August 14, 2014

Rev: A0814

Doc: DBE_MB-CC VIR

Explanation of the symbols on the product label:

REF	Bestellnummer Catalog Number Reference du catalogue		Verwendbar bis Use By Utiliser jusque		Gebrauchsanweisung beachten Consult Instructions for use Consulter les instructions d'utilisation
LOT	Chargenbezeichnung Batch Code Code du lot		Lagerungstemperatur Temperature Limitation Limites de température	RUO	Nur für Forschungszwecke For Research Use Only Pour la recherche uniquement
IVD	In vitro Diagnostikum In Vitro Diagnostic Medical Device Dispositif médical de diagnostic in vitro		Achtung/Gefahr Warning/Danger Attention/Danger		Achtung Warning Attention
	Achtung/Gefahr Warning/Danger Attention/Danger		Gefahr Danger Danger		Achtung/Gefahr Warning/Danger Attention/Danger
					Hersteller / Manufacturer / Fabricant Zytomed Systems GmbH Anhaltinerstraße 16 14163 Berlin, Germany Tel: (+49) 30-804 984 990 www.zytomed-systems.de