

## Datasheet Marrowpan

Highly efficient complete medium (ready-to-use) for cytogenetic analysis of bone marrow, peripheral blood and hematopoietic cells

Product	Description	Catalogue-No.	Size
Marrowpan	Complete medium for the cultivation and cytogenetic analysis of bone marrow, peripheral blood and hematopoietic cells	P04-70200	100 ml

### Product description

Marrowpan is a complete ready-to-use medium intended for *in vitro* diagnostic procedures with a short term culture of bone marrow and other hematopoietic cells for cytogenetic studies. This product has been quality tested by a leading clinical cytogenetic reference laboratory for this application.

Marrowpan is intended for *in vitro* use and has been designed for establishing cultures of bone marrow and leukaemic blood cells, which then can be used in karyotyping, fluorescence in-situ hybridisation (FISH) or other cytogenetic procedures.

Marrowpan can be used as a neutral medium to culture different haematopoietic cells (myeloid and lymphoid lineages) present in bone marrow or leukaemic blood samples. Marrowpan is also used together with a mitogen specific for B or T lymphocytes where these particular lineages are being investigated.

### Storage conditions

Storage: -20 °C in the dark  
 Stability: 2 years  
 Size: 100 ml, other sizes on request

### Composition

Marrowpan is supplied frozen as a complete medium, ready to use in a 100ml format. It is based on alpha-MEM and contains antibiotics, L-glutamine, Foetal Bovine Serum (FBS), hormones and growth factors. This product is manufactured under strictly supervised quality system in conformance with the ISO 9001/EN and ISO 13495 (medical products and *in vitro* diagnostics) requirements.

### Suitability

Marrowpan is a complete medium (ready-to-use) for the cultivation of cells from peripheral blood or bone marrow. It is suitable for a rapid expansion of blood cells in order to investigate leukemic diseases (e.g. ALL, AML, CLL, CML, MPN, MDS). The state of the art diagnostic techniques of leukemic diseases are based on the interaction of cytomorphology including cytochemistry with immunophenotyping, chromosome banding analysis, FISH and molecular genetics. The number and quality of metaphases in Marrowpan are significantly higher and independent of individual batches as compared to serum-containing media.

### Instructions for Use

Marrowpan is a complete medium, provided in a frozen, sterile format. Re-filtering of the medium is not necessary. Detailed information concerning handling of Marrowpan and cell cultivation techniques are available in a separate Instruction for use brochure. Thawed Marrowpan can be used up to 2 weeks when stored at 2-8 °C. Repeated warming and cooling and exposure to light should be avoided.

## Performance Testing

Marrowpan is tested for pH, osmolarity, bacterial, mycoplasma and fungal contamination. In addition to these standard specifications, each lot is tested for cell growth by an independent cytogenetics laboratory and product performance is compared to a reference standard. A Certificate of Analysis is available upon request.

## Addition of specific growth factors

In some cases specific growth factors may be added to enhance the number of metaphases and to increase the mitotic index.

B-CLL	CD40 ligand or CpG oligonucleotide (2µM) + IL-2 (200 U/ml)
AML, CML, CMPD, MDS	G-CSF(10ng/ml) + GM-CSF (1ng/ml) + IL-3 (5ng/ml) + SCF (20ng/ml)

## Precautions

Do not use product when the packaging appears compromised or visible precipitate is observed or the product is received thawed or partially thawed. Avoid prolonged exposure to light. As Marrowpan contains FBS, flocculent debris may develop upon thawing and storage.

## Limitations

Each batch of Marrowpan is thoroughly tested for biological performance to ensure cell growth and *in vitro* diagnostic use.

However, for *in vitro* diagnostic applications each laboratory should establish and regularly perform internal quality testing procedures when selecting new cell culture media or utilising new batches of media prior to releasing these to the clinical routine.

In particular, the contribution of PAN Biotech to these procedures is limited merely to providing a culture medium which has been tested and found suitable for the intended use. PAN Biotech therefore does not guarantee a successful implementation for specific settings especially in diagnostic procedures.

In addition, PAN Biotech can not be held responsible for damage due to absence of cell growth or diagnostic failure based solely on the use of PAN Biotech medium.

**Only for *in vitro* diagnostic use by means of culture and growth of human sample material.  
Not intended for human or animal therapeutic use.**

**USE BIOLOGICAL MATERIAL WITH RESPECTIVE SAFETY PRECAUTIONS**

## Technical Support

Additional information is available on our website: [www.pan-biotech.com](http://www.pan-biotech.com)

For technical support, questions or remarks please contact your local PAN-Biotech partner or the technical department of PAN-Biotech via email ([info@pan-biotech.com](mailto:info@pan-biotech.com)).

## MANUFACTURER

PAN-Biotech GmbH  
Am Gewerbepark 13  
D - 94501 Aidenbach  
Germany

Fax: +49 8543 6016-49  
E-Mail: [info@pan-biotech.de](mailto:info@pan-biotech.de)  
Web: [www.pan-biotech.com](http://www.pan-biotech.com)