



MarrowPrime 2

High Mitotic Index. Reliable Karyotyping.

Accurate karyotyping of bone marrow samples plays a vital role in the diagnosis and monitoring of hematological malignancies. However, primary bone marrow cells often present a challenge *in vitro*. **MarrowPrime 2** was specifically developed to overcome these limitations. This ready-to-use medium is optimized for mitotic stimulation in short-term bone marrow cultures. It promotes robust proliferation and elevated mitotic activity within 24 hours, facilitating efficient chromosome banding and downstream cytogenetic analysis.

KEY BENEFITS OF MarrowPrime 2



» Exceptionally High Mitotic Index

Achieves up to 19% mitotic cells within 24 h – enabling fast, reliable metaphase harvests and superior karyogram quality



» Ready-to-use formulation

Delivered frozen, complete with pretested FBS, hormones, antibiotics, and growth factors without additional supplements required



» Consistent Performance From Batch to Batch

Demonstrated high reproducibility across independent batches ($\leq 1\%$) ensuring reliable performance across cytogenetic workflows



» Enhanced proliferation & attachment

Promotes robust cell outgrowth and stable culture initiation – even from low-yield or fragile primary samples

EXPERIMENTAL RESULTS

Proven performance for cytogenetic diagnostics

To assess the efficiency of MarrowPrime 2 in promoting mitotic activity, primary bone marrow mononuclear cells were cultured in parallel with various commercially available cytogenetic media. Mitotic index and batch consistency were measured after 24 hours using standard cytogenetic protocols.

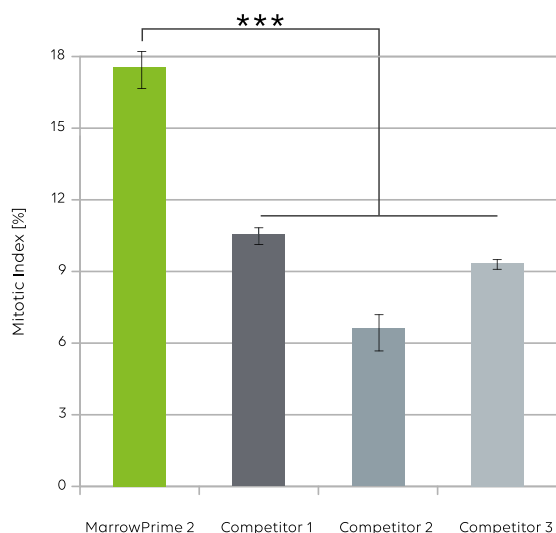


Fig. 1 Superior Mitotic Response after 24 h

MarrowPrime 2 induced the highest proportion of mitotic cells (~19%) compared to leading competitor products. This robust response within a short cultivation period enables timely and high-quality metaphase preparation – critical for accurate karyotyping diagnostics.

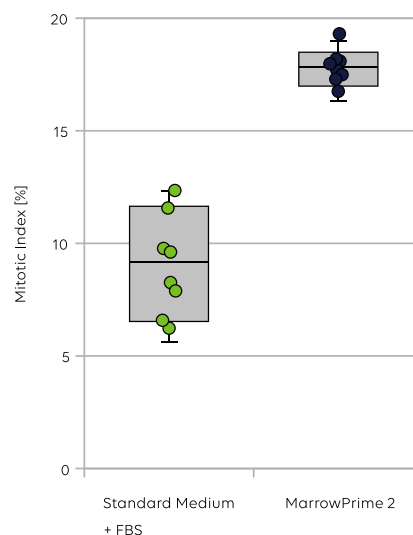


Fig. 2 Lot-to-Lot Consistency Across Batches

Four independent batches of MarrowPrime 2 were evaluated for performance. Results revealed minimal variation in mitotic index (standard error $\leq 1\%$), confirming the medium's reliability and reproducibility for routine use in diagnostic laboratories.

ORDER INFORMATION

PRODUCT

MarrowPrime 2

Complete Medium for Bone Marrow Cells
CE marked

Colcemid Solution (10 µg/ml) in DPBS

CE marked

Potassium Chloride (KCL) Solution 0.075 M

VOL. CAT.NO.

500 ml MP2-A

100 ml MP2-B

10 ml COL-H

100 ml KCL-B



SCAN FOR MORE
INFORMATION

For further support, feel free to contact our experts at techservice@capricorn-scientific.com or phone (+49 6424 944 64 0).

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