

MAPTrix™ Screen

Overview

A promising tool for the *in vitro* exploration of extracellular microenvironment (ECM) factors that regulate cell functions is the combinatorial library approach. With the use of combinatorial libraries, one can explore the effect of numerous known and unknown factors, alone or in complex combinations- in analogous to those encountered in natural extracellular microenvironments.

MAPTrix™ Screen is the ECM array that enables researchers to not only quickly identify the best ECM composition to mimic natural extracellular microenvironments, but also pinpoint the concentration needed to achieve optimal cell adhesion, growth or differentiation conditions.

Product Description

The basic layout of the MAPTrix™ Screen is comprised of $\alpha v\beta 3$ and its complementary integrin such as $\alpha 2\beta 1$ (collagen), $\alpha 3\beta 1$ (laminin), $\alpha 5\beta 1$ (fibronectin), and heparin/syndecan binding motif. Kollodis also provides tailored array surfaces for specific customer applications. Feel free to contact us if you require a specialized array comprised of integrin binding surfaces.

Figure 1. Basic Layout of MAPTrix™ Screen (24 & 48 well plate)

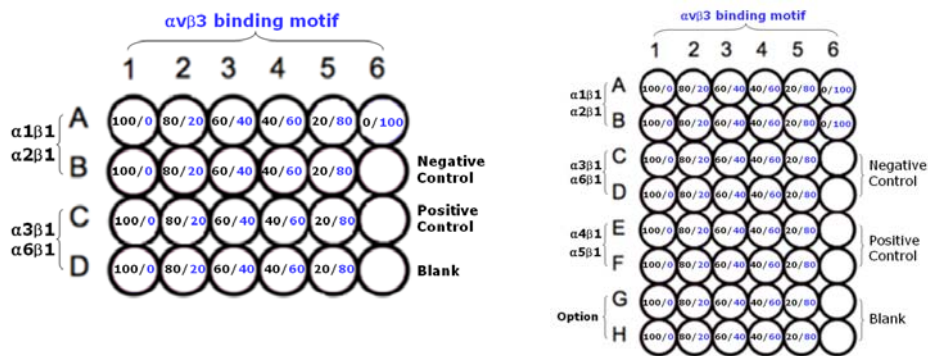


Table 1. List of binding motifs

Receptor	Basic Binding Motif	Custom Binding Motif
$\alpha v\beta 3$	IKVAV($\alpha v\beta 3$, $\alpha 3\beta 1$, $\alpha 6\beta 1$)	KAFDITYVRLKF ($\alpha v\beta 3$, $\alpha 5\beta 1$) RQVFQVAYIIIIKA ($\alpha v\beta 3$, $\alpha 5\beta 1$) MNYYSNS ($\alpha v\beta 3$)
$\alpha 1\beta 1$ or $\alpha 2\beta 1$	DGEA ($\alpha 2\beta 1$) GFPGER ($\alpha 1\beta 1$, $\alpha 2\beta 1$)	GLPGER ($\alpha 1\beta 1$) GEFYFDLRLKGDK ($\alpha 2\beta 1$, heparin)
$\alpha 3\beta 1$ or $\alpha 6\beta 6$	YIGSR ($\alpha 3\beta 1$, $\alpha 1\beta 1$) TWYKIAFQRNRK ($\alpha 6\beta 1$)	NRWHSIYITRFG ($\alpha 6\beta 1$) GIIFFL ($\alpha 3\beta 1$, $\alpha 6\beta 1$)
$\alpha 4\beta 1$ or $\alpha 5\beta 1$	REDV ($\alpha 4\beta 1$) GRGDSP ($\alpha 5\beta 1$)	PHSRN ($\alpha 5\beta 1$) PHSRN-RGDSP ($\alpha 5\beta 1$) KLDAPT ($\alpha 4\beta 1$ or $\alpha 4\beta 7$) EILDVPST ($\alpha 4\beta 1$ or $\alpha 4\beta 7$)
Heparin or Syndecan	- Heparin * FRHRNRKGY, GEFYFDLRLKGDK - Syndecan: * RKRLQVQLSIRT, WQPPRARI	Heparin: - KNNQKSEPLIGRKKT, YRVVTPKEKTGPMKE, SPPRRARVT (FN) - KGHRGF, TAGSCLRRFSTM (CL)

Storage Conditions:

- MAPTrix™ Screen should be stored in the foil pouch at refrigerator and used within 3 months of the date of receipt
- Each plate is packaged in a foil pouch that has been flushed with nitrogen gas.
- Do not freeze

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