PLATE COATING – Which Matrix Should You Choose?

Would you like to culture hPSCs feeder-free?

No

Yes

OK, let's help you choose a matrix for your hPSC culture needs.

Do you want a simplified and defined matrix?

Yes

No

Why?
Feeder cells can introduce variability, as well as immunogenic animal-derived components into your hPSC culture. Matrices save you time. They are more reproducible and can be coated on the same day you need to seed your hPSCs.

Do you want a xeno-free matrix?

Yes

No

Vitronectin XF™ is comprised of a single defined, recombinant human protein expressed under chemically defined conditions.

Corning® Matrigel® is a basement membrane preparation extracted from EHS mouse sarcoma cells. It is comprised of undefined mixture of immunogenic mouse proteins such as laminin, collagen IV, entactin, as well as multiple growth factors and matrix metalloproteinases.

Vitronectin XF™ is a recombinant fully humanized protein expressed under xeno-free conditions. Maintain hPSCs in TeSR™2 or TeSR™-E8™ with Vitronectin XF™ for a xeno-free culture system.

Do you want to save time?

No

Yes

Vitronectin XF™

Corning® Matrigel®

Seriously?

Do you want to prepare reagents at room temperature?

No

Yes

Vitronectin XF™ is easy to use and ready for coating plates at room temperature.

Do you want to culture in mTeSR™1, TeSR™2 or TeSR™-E8™?

mTeSR™1

TeSR™2

TeSR™-E8™

Do you want to automate coating your plates?

No

Yes

Corning® Matrigel® will form a gel above 10°C, thus it is recommended to pre-chill plates, tips, pipets and tubes.

That was a trick question!
Both Vitronectin XF™ and Corning® Matrigel® are compatible with all TeSR™ family maintenance media.

Use either Vitronectin XF™ or Matrigel® for manual coating of plates, for a more personal touch.

As Vitronectin XF™ is not as temperature-sensitive as Matrigel®, we recommend Vitronectin XF™ for any automated plate coating and culture systems.