



VITAVITRO® STRAW SET

Introduced by Professor Gábor Vajta in **1998**. It is **an open system** and well known as **open pulled straw** (OPS) that is the first purpose-designed tool for vitrification and recognized as one of the best high-rate cooling-warming vitrification methods, with the cooling rate of 22,500°C/min (Vajta et al., 1998). It can be used for vitrification at all cell stages successfully.

One straw set contains a straw and a container, available in 5 different colors.

SIGNIFICANT ACHIEVEMENTS:

The **FIRST** human baby after oocyte vitrification (*Kuleshova et al., 1999*) The **FIRST** cloned animal after embryo cryopreservation (*Tecirlioglu et al., 2003*) The **FIRST** calf after cryopreservation of immature oocytes (*Vieira et al., 2002*) The **HIGHEST** survival-developmental rates after cryopreservation of human ES cells (*Reubinoff et al., 2001*)

The VitaVitro Straw Set is available in the USA and other selected countries around the world.



SIMPLE OPERATION, SAFE STORAGE

Utilizes capillary action for simple loading with a defined solution volume Simplify the process by combining rewarming and dilution into one step, and use the thermal expansion of air to automatically expel cells Sealed containers to guarantee long-term storage in liquid nitrogen



Maximum performance in combination with VitaVitro Vitrification kit and VitaVitro Warming kit.



Touch the droplet with the narrow end of the straw and the capillary effect will force the medium to enter it. Put the straw into liquid nitrogen for vitrification immediately, and then transfer the straw into the pre-cooled container.



Tightly cover the wide end of the straw with your index fingers. The medium will flow out from the straw as a result of the increased pressure of the warming air inside the straw.

OPTIMAL SURVIVAL RATE IS SECURED BY UNCOMPROMISING DEDICATION



REFERENCE

- Vajta G., Holm P., Kuwayama, M., Booth P. J., Jacobsen H., Greve T., Callesen H. Open pulled straw (OPS) vitrification: A new way to reduce cryoinjuries of bovine ova and embryos. Molecular Reproduction and Development, 1998, 51(1): 53-58.
- 2 Kuleshova L., Gianaroli L., Magli C. Ferraretti A., Trounson A. Birth following vitrification of a small number of human oocytes: Case Report. Human Reproduction, 1999; 14(12): 3077–3079.
- Vieira, A., Mezzalira, A., Barbieri, D., Lehmkuhl, R., Rubin, M. I., & Vajta, G. (2002). Calves born after open pulled straw vitrification of immature bovine oocytes. Cryobiology, 45(1), 91-94.
- Reubinoff, B. E., Pera, M. F., Vajta, G., & Trounson, A. O. (2001). Effective cryopreservation of human embryonic stem cells by the open pulled straw vitrification method. Human Reproduction, 16(10), 2187-2194.
- Tecirlioglu RT, French AJ, Lewis IM, Vajta G, Korfiatis NA, Hall VJ, Ruddock NT, Cooney MA, Trounson AO (2003). Birth of a cloned calf derived from a vitrified hand-made cloned embryo. Reprod Fertil Dev. 15(7-8), 361-366.



Shenzhen VitaVitro Biotech Co., Ltd. R601, Building B, Hai Ke Xing Tech Park Pingshan, Shenzhen, Guangdong 518118 P.R. China Tel: +86 755 84511813 Email: tech@vitavitro.com

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www.vitavitro.com