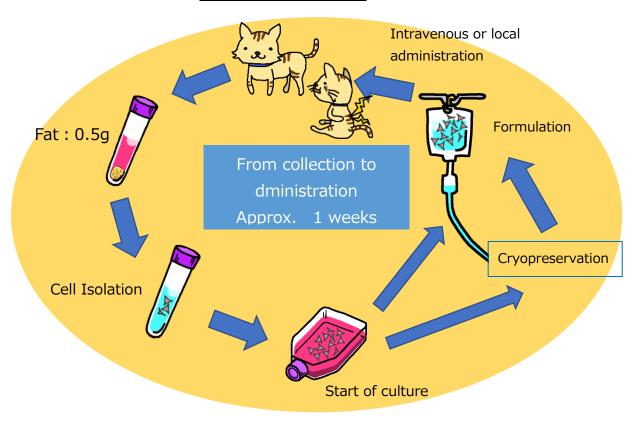




Culture kit for feline adipose stem cells (ADSC) Neo

The Feline ADSC Neo Expansion Culture Kit is a kit for conveniently culturing ADSCs from adherent cells isolated from 0.5 g of fat.



Forte

Incubation period is about 1 week

•P0 cells can be dosed and frozen

All-in-one

·All aspects of culture can be done with

Disposable

·No contamination by reuse

Can be prepared in-house at a general hospital



Minimally invasive with only an intravenous infusion

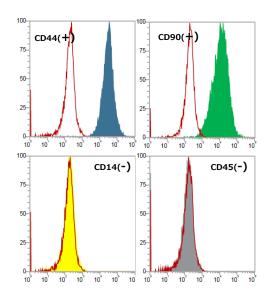


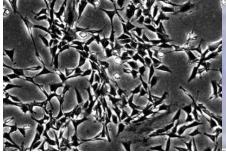
Composition

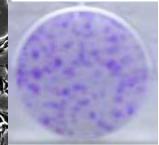
This all-in-one culture kit includes everything necessary for a single treatment from culture to administration, including culture bag, culture medium, and pipettes.

Application Examples

Cultured cells exhibited characteristics of ADSC morphology and colony formation was confirmed by CFU-F assay. Surface markers expressed were confirmed by flow cytometry analysis. In addition, tri-differentiation potential (osteogenesis, chondrogenesis, and adipogenesis) was confirmed by staining for each differentiation potential.

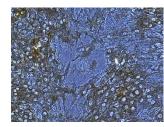




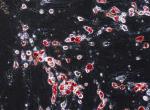


Feline ADSCs in culture

Feline CFU-F



Von Kossa staining of osteodifferentiated ADSCs



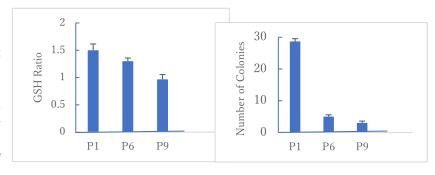
Oil red O staining of adipose-differentiated ADSCs



Alcian blue staining of chondrogenically differentiated ADSCs

Quality of ADSC

Quality was evaluated by quantification of glutathione (GSH), the most abundant non-protein thiol that functions as an antioxidant and redox regulator, and by colony-forming ability; P1 had higher levels of GSH and formed more colonies than P9, indicating that ADSCs with fewer passages are better quality P1 had higher GSH and formed more colonies than P9, indicating that ADSCs with fewer passages are superior in terms of quality.



Literature and Presentations

- 1) Tohya S, Mitani K, Ito Y, Inaba T, Okada K. (J-ARM Inc.), QOL evaluation by owners in canine cancer immunotherapy and fat stem cell therapy, 160th Annual Meeting of the Japanese Society of Veterinary Science 2017.
- 2) Ito Y (J-ARM Inc), On Cell Culture (Culture Techniques for Activated Lymphocytes and Dendritic Cells), The 160th Annual Meeting of the Japanese Veterinary Medical Association 2017.
- 3) Mitani K¹, Ito Y¹, Takene Y¹, Jeong EM², Kang HS², Kim IG³, Inaba T^{1,4}, Hatoya S⁴, Sugiura K⁴ (¹ J-ARM. ²Cell2in, Korea. ³ Seoul National University, Korea. ⁴ Osaka Prefecture University), TISSUE ENGINEERING & REGENERATIVE MEDECINE Exposition 2018.
- 4) Mitani K¹, Ito Y¹, Takene Y¹, Shin J², Jeong EM³, Kang HS², Kim IG³, Inaba T^{1,4}, Hatoya S⁴, Sugiura K⁴ (¹ J-ARM Corporation, ² Cell2in (Korea), ³ Seoul National University (Korea), ⁴ Osaka Prefecture University), Dog and cat. Mesenchymal Stem Cell Isolation and Quality Assessment by Monitoring Glutathione Content, Japanese Society for Veterinary Regenerative Medicine 14th Annual Meeting 2019.

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