

- Recent advances in ocular regenerative research suggest the replacement of the retinal pigment epithelium (RPE) as the most promising treatment option for age-related macular degeneration.
- With treatment strategies improving, there is likely to be a need for improved storage methods for cultured RPE cells in the future.
- In a previous study, we showed that storage of adult RPE (ARPE)-19 cultures in serum free minimum essential medium (MEM) was optimal at 16°C.
- The present study aimed at improving the preservation of ARPE-19 cultures by supplementing MEM with storage medium additives.
- The viability of ARPE-19 cell cultures can be increased by the addition of [D-Ala², D-Leu⁵]-Enkephalin (DADLE), capsazepine, docosahexaenoic acid (DHA) or resveratrol to the storage medium without perturbing apoptosis or differentiation.

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