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Korea's GenKOre develops new base-editing technology for treating genetic diseases

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GenKOre is a business spun off from the Korea Research Institute of Bioscience and Biotechnology (KRIBB)



GenKOre, a biotech startup in South Korea, succeeded in the development of adenine base editors (ABEs) based on its own hypercompact gene-editing technology.

The hypercompact ABEs developed by GenKOre is characterized by compactness in size that can be delivered using adeno-associated virus (AAV) and boast of specific and versatile base-editing activity, which was also validated *in vivo*. Previous base-editing technology was developed based on such a 'big' SpCas9 nuclease that it cannot be delivered by payload-limiting AAV vectors and has been thus confined for hepatic delivery. This new base-editing technology is expected to provide various *in vivo* treatment options for genetic diseases through AAV delivery.

GenKOre recently expanded its research facility in Seoul in an effort to attract a large number of human resources for the development of hypercompact ABEs-based gene therapy, seeking collaborations with pharmaceutical companies and academia. Besides, it is expanding business to *ex vivo* gene therapy by making strategic alliance with companies with expertise in immune cells and hematopoietic stem cells. The ABE platform will be thus employed to develop *ex vivo* gene-editing therapy.