

## Researchers discover gene which may create pain killers

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## It finds wide application in food and pharmaceutical industries



A collaborative work of researchers from centre of Innovative and Applied Bioprocessing, Mohali, Punjab and Institute of Bioresources and Sustainable Development (IBSD), Manipur have identified a new gene that could be used to synthesise gamma-aminobutyrate, which is a high-value biomolecule with neuroprotective features.

The scientists have isolated the new gene from samples of Kinema, a naturally fermented soybean food product which is found in Sikkim himalayan region of India. The scientists have also developed a new method to synthesise gamma-aminobutyrate from Glutamate molecule using the new gene.

Gamma-aminobutyrate is effective against multiple nerve cells problem. With its multiple neuroprotective effects over the years it has become a popular option for stress and pain management. It finds wide application in food and pharmaceutical industries. It can be used as a precursor molecule for synthesis of polymers like Nylon-4.

The scientists have filed a patent for their invention under Patent File No. 201911030305. The joint research team consisted of Dr. Sudhir P. Singh, Dr. Nitish Sharma, Dr. Amit K. Rai, and Dr. Dinabandhu Sahoo.