

Article Title No. 3	MOLECULAR ANALYSIS OF A PUTATIVE EN/SPM-RELATED TRANSPOSON PROTEIN IN <i>BRASSICA JUNCEA</i>
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ABSTRACT

Open reading frame (ORF) of Putative En/Spm transposon in Brassica potentially helps to understand the relationship between various eukaryotic transposable elements. The current study was initially conducted to isolate and analyze the putative En/Spm-related transposon gene from *Brassica juncea*. PCR products (750 bp) from *B. juncea* (accession PI 649105 and PI 271442) were cloned, sequenced, and analyzed. Results of BLAST showed identical sequences between two accessions with 100% similarity. The amplified DNA transposon and conserved domain compared to the GenBank database to evaluate the genetic diversity relationships. Sequence of this putative transposon gene from *B. juncea* was a 98% similar to *B. rapa* subsp *pekinensis* at the nucleotide level, and 94% with the En/Spm-related transposon protein of *B. oleracea* at the amino acid level. Conserved domain architecture was related to transposase_21_pfam0299 and transposase family tnp2 and had a relationship with space outside the cell structure and/or to space outside the plasma membrane.

