World Academy of Science, Engineering and Technology
International Journal of Biotechnology and Bioengineering
Vol:11, No:04, 2017

Functional Variants Detection by RNAseq

Authors : Raffaele A. Calogero

Abstract : RNAseq represents an attractive methodology for the detection of functional genomic variants. RNAseq results obtained from polyA+ RNA selection protocol (POLYA) and from exonic regions capturing protocol (ACCESS) indicate that ACCESS detects 10% more coding SNV/INDELs with respect to POLYA. ACCESS requires less reads for coding SNV detection with respect to POLYA. However, if the analysis aims at identifying SNV/INDELs also in the 5' and 3' UTRs, POLYA is definitively the preferred method. No particular advantage comes from ACCESS or POLYA in the detection of fusion transcripts.

Keywords : fusion transcripts, INDEL, RNA-seq, WES, SNV
Conference Title : ICGI 2017 : International Conference on Genome Informatics
Conference Location : Kyoto, Japan
Conference Dates : April 27-28, 2017