1. Bioinformatics Analysis

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| **Standard Analysis (Species with Reference[*VAR\_SPECIES*])** | |
| Data Quality Control: Filtering reads containing adapter or uncertain nucleotides or of low quality, and statistic summary of data quality | |
| Mapping Clean Reads to Reference Genome | |
| Novel Gene Prediction | |
| Gene Expression Quantification | |
| Correlation Analysis Between Groups (**Only for Samples with biological replicates**) | |
| Differential Expression Analysis (**Only for Grouping with control samples**) | |
| Functional Analysis of **Differentially Expressed Genes** (DEGs) (**Only for Grouping with control samples**) | Gene Ontology (**GO**) Enrichment Analysis |
| Kyoto Encyclopedia of Genes and Genomes (**KEGG**) Pathway Enrichment Analysis |
| Transcription Factors Functional Annotation analysis |
| Protein Protein Interaction Analysis |
| Structural Analysis | Alternative Splicing (**AS**) Quantification and Differential Expression Analysis (**Only for Grouping with control samples**) |
| SNP/InDel Detection and Annotation Analysis |
| Transcriptional Analysis **(Only for Strand Specific Library)** | Transcription Factor Prediction |
| Antisense Transcripts Prediction |
| Transcription Start Site (**TSS**) and Transcription Termination Site (**TSS**) Prediction |