

Convert.Alevin Documentation

Description: Read alevin output files and convert them to annuata (.h5ad) or loom (.loom) format for downstream analysis. Designed to convert alevin files from runs with a velocity processed transcriptome into a compatible format for scVelo.

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Summary: In order to use alevin quantifications from the alevin velocity pipeline with downstream tools like scVelo; the quantifications must be converted into annuata or loom format containing separate layers for the spliced and unspliced matrices. This module accepts alevin quantification directories (in tar.gz format) and produces scVelo compatible annuata or loom files.

Parameters:

Name	Description
Alevin Quants	Alevin output directories. Must be in .tar.gz format,
	and have unique names. The directory name will be
	used to annotate the cell barcode origins in the
	resulting output files.
Features	A tab delimited file containing the list of spliced gene ids in column 1, the unspliced gene ids in column 2,
	and gene names (symbols) in column 3. (From
	PreprocessVelocityTranscriptome, or manually
	created). Optional. If not provided the module will
	assume unspliced genes end with the suffix "-I".
Merge	Merge (outer join) multiple alevin quantifications into
	a sinlge output file (true) or produce separate output
	files for each input file (false). If "true" the input
	directory name will be appended to the cell barcodes
	and stored as a "batch" layer for downstream
	analysis.
Out Type	Output anndata h5ad files (h5ad) or loom files (loom)

Output File(s): one or more h5ad or loom files

Module Language: Python

Source Repository: https://github.com/genepattern/Convert.Alevin/releases/tag/v1

Docker image: python:3.8.8-slim-buster

Version	Comment
1	Initial release.