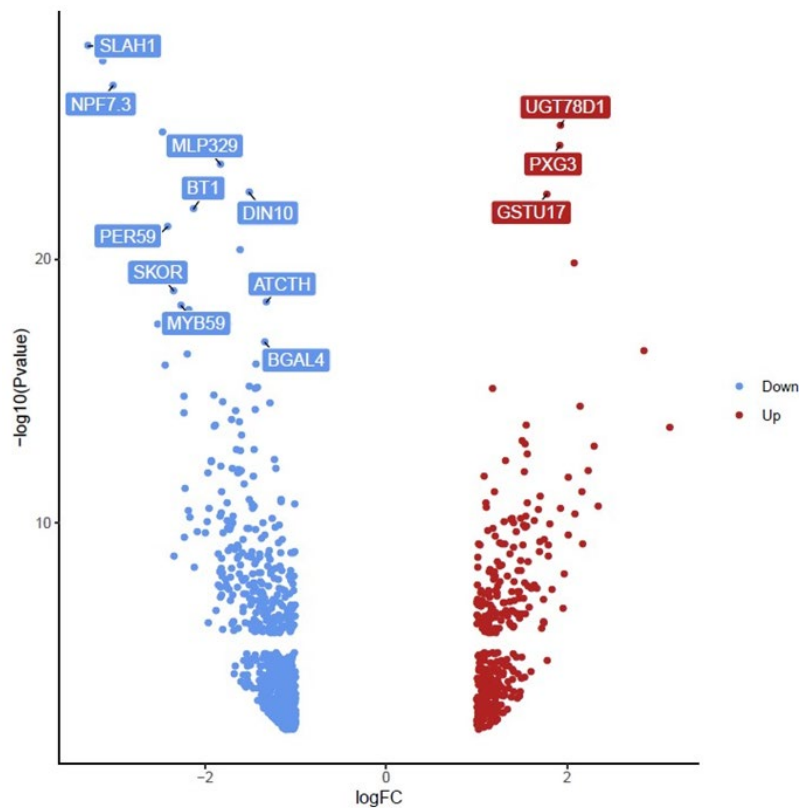


Activity 5: Arabidopsis Study (GLDS-38) Volcano Plot

Curricular Unit Teacher Materials

Instructions: Look at the volcano plot below and answer the questions. (Teachers: Please reference the supplemental file that explains generation of this graph and what the information in it reveals.)



1. What do the blue dots on the volcano plot represent?
Significantly down regulated genes
2. What do the red dots on the volcano plot represent?
Significantly upregulated genes
3. Which gene was the most downregulated? Upregulated?
Down regulated-SLAH1, Upregulated-UGT78D1
4. Go to [TAIR - Home Page \(arabidopsis.org\)](http://arabidopsis.org) and search for the function of these genes. Propose reasons that explain why regulation of these genes would change in space. (You will learn more about genes and their expression in a future lesson.)
Answers will vary