

BCM and UT Austin SOP: Image curation

A. Selecting images to public dissemination

For each developmental time-point in mouse (E16.5, E18.5, P7, P28), two slides totaling eight sections were utilized for each RNA probe during *in situ* hybridization. These eight images/sections were subjectively ranked based on overall ability of the image to accurately illustrate the gene expression in the lung. This overall quality is a combination of *in situ* hybridization quality (uniformity), tissue quality (minimal tears, folds), and minimal artifacts (dust, air bubbles). The top four images from each set of eight defined the standard of quality for that set. These four images, plus any additional images of the eight that met the standard of quality for that set, were made public.

For P7 and P28, four images were from left lung, and four images from right lung. For these ages, standard quality of images was tracked independently between left and right, with a minimum of two images from each selected to be made public.

B. Selecting representative image

From each set of four to eight images selected to be made public for a probe at a developmental time-point, a representative image was selected. This representative image is the image that best illustrates the large airways and vasculature in the left lung.

C. Exceptions

In some rare cases, fewer than the desired minimum number of sections met basic expectations of quality. If fewer than two images for a specific probe at a given age met minimal expectations of quality, the entire experiment for all ages for that probe was repeated on a new set of tissue sections.