VERSION 2

MAR 18, 2018

OPEN ACCESS

DOI:
dx.doi.org/10.17504/protocols.io.neudbew

External link:
<https://doi.org/10.1371/journal.pone.0193057>

Protocol Citation: Shanon Seger 2018. Rat Lung Fibrosis Orbit detection model.
protocols.io
<https://dx.doi.org/10.17504/protocols.io.neudbew>

MANUSCRIPT CITATION:
 Seger S, Stritt M, Vezzali E, Naylor O, Hess P, Groenen PMA, Stalder AK (2018) A fully automated image analysis method to quantify lung fibrosis in the bleomycin-induced rat model. PLoS ONE 13(3): e0193057. doi: [10.1371/journal.pone.0193057](https://doi.org/10.1371/journal.pone.0193057)

License: This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working

Rat Lung Fibrosis Orbit detection model V.2

PLOS One

Shanon Seger¹

¹Idorsia Pharmaceuticals Ltd

Shanon Seger

ABSTRACT

To ensure reliable quantification of rat lung fibrosis, support vector machine learning was used on digitalized images to design a fully automated method that analyzes two important aspects of lung fibrosis: (i) areas having substantial tissue remodeling with appearance of dense fibrotic masses and (ii) collagen deposition.

GUIDELINES

The detection model is working for fixed (under pressure) rat lung paraffin sections cut 2um thick and stained for Masson's trichrome (applicable staining range described in the linked manuscript)

Created: Feb 23, 2018

Last Modified: Mar 28, 2018

PROTOCOL integer ID:
10420

Keywords: Image analysis,
Orbit, Lung Fibrosis

1