

Abstract

[Problem] To provide a biological tissue analyzing device, a biological tissue analyzing program, and a biological tissue analyzing method capable of identifying the altered state of the biological tissue using hyperspectral data with high accuracy.

[Solution] A biological tissue analyzing device configured to analyze a biological tissue using hyperspectral data in which spectral information is associated with each of pixels forming a two-dimensional image and comprising the following (i) and (ii), as well as comprising (iii) and/or (iv):

- (i) a hyperspectral data acquisition unit configured to acquire the hyperspectral data;

- (ii) an analysis target region extraction unit configured to extract pixels corresponding to an analysis target region from a two-dimensional image of the biological tissue;

- (iii) an altered state classification unit configured to roughly classify an altered state of the biological tissue with unsupervised learning; and

- (iv) an altered state identification unit configured to identify the altered state of the biological tissue with supervised learning.