

CLAIMS

1. A fluorescence observation device for performing fluorescence observation of a sample piece cut out from a sample with an identical fluorescence probe, the fluorescence observation device comprising:

5 a tray on which the sample piece is placed;
a light source unit which generates excitation light to irradiate the sample piece;

a detection unit which detects fluorescence from the sample piece; and

10 an image generation unit which generates a fluorescence image of the sample piece based on a detection signal from the detection unit,

wherein the tray includes a plurality of placement regions provided around a center region of the tray and also includes a marker portion indicating a cutting orientation of the sample piece with respect to the sample and an orientation of each of the plurality of placement regions relative to the center region.

2. The fluorescence observation device according to claim 1,
wherein the tray includes a reference portion which generates fluorescence of reference intensity by irradiation with the excitation light.

20 3. The fluorescence observation device according to claim 2,
wherein the reference portion is provided in the center region.

4. The fluorescence observation device according to any one of claims 1 to 3,

25 wherein the plurality of placement regions are partitioned from each other by a partition member.

5. The fluorescence observation device according to any one of

claims 1 to 4,

wherein the placement region is provided with a fixing portion which fixes the sample piece.

6. The fluorescence observation device according to any one of claims 1 to 4, further comprising:

a dish which is disposed on the placement region,

wherein the dish is provided with a fixing portion which fixes the sample piece.

7. The fluorescence observation device according to any one of claims 1 to 6,

wherein the image generation unit has a brightness distribution for detecting the fluorescence in the detection unit and performs shading correction of the fluorescence image based on the brightness distribution.

8. The fluorescence observation device according to any one of claims 1 to 7,

wherein the image generation unit generates a result image in which a fluorescence observation result of the sample piece is associated with the placement region.