

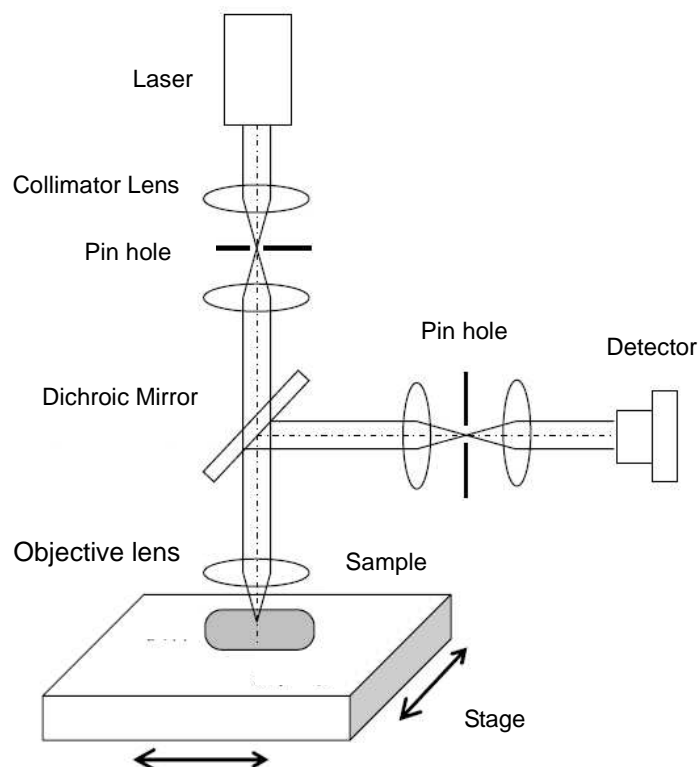
Confocal Laser (Scanning) Microscope

A confocal laser (scanning) microscope is a microscope which can obtain high-resolution images by focusing a laser beam on a microscopic point and performing a two-dimensional scanning.

The beam mode is adjusted by passing the laser light irradiated from the light source through a spatial filter (condensing the light with a lens and getting it through a pinhole). Then, the light is filtered through a dichroic mirror (or a beam splitter), and the incident light into the objective lens is condensed in a single point on the surface or in the interior of the sample. The fluorescence generated from the substances the light contacts is passed through the objective lens, reflected on the dichroic mirror, passes through the pinhole, and is detected using a detector. A high-resolution image with resolution at a level of several nanometers can be obtained by moving the stage in a horizontal direction and performing a two-dimensional scanning.

Also, by placing a pinhole in front of the detector, fluorescence other than that on the exposed surface is removed, and a clear, focused image can be obtained.

Can be used with BV lasers of all wavelengths (375, 405, 445 and 488 nm).



Confocal Laser (Scanning) Microscope