

Orcein

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ORCEIN, PROJECT al Affiliation . Orcein Project Orcein occurs as a natural dye acquired from lichens that are found to stain copper-associated protein, elastic fibers, and hepatitis B surface antigen. Orcein always binds itself to the cytoplasmic enclosure bodies of the hepatocytes causing proof of a positive Hepatitis B virus. In addition, it binds to the serological markers including copper associated proteins, HBsAg, and elastic fibers to give distinct stain. (Ferrell, 2000).

The results demonstrated the usefulness of Orcein staining property in detecting HBsAg. It, therefore, proved significant and added to numerous diagnostic techniques for Hepatitis B detection in patients (Krishna, 2013). The project recommended that, when performing Orcein staining technique, it is important to use Orcein from different suppliers, which can reduce errors in the detection process by comparing the different results obtained by each company's dye (Krishna, 2013). It is also important to stain at least a sample of five or more slides before deeming the results as negative. Orcein staining technique is thus, a simple and excellent method for detecting HBsAg, resulting in a positive Hepatitis B result and can give reproducible results in a routine environment.

In addition, the project explains how Hepatitis B infects the hepatocytes of the liver. The Hepatitis B antigen (HBsAg) occurs as granules, which are fine in texture and can be diffusely spread out on the entire cytoplasm or concentrated in the peripheral regions of the cytoplasm or the sinusoidal space (Ray, 2012). The appearance of these granules is referred to as ground glass. HBsAg appears as round, oval or as irregularly shaped aggregates in a single cell involvement. (Kirkpatrick, 1982).

Even though the examination is necessary when diagnosing Hepatitis B, a <https://assignbuster.com/orcein/>

number of staining techniques exist that assist in detecting Hepatitis B in the liver (Krishna, 2013). Some techniques such as a simple H & E stain or other immunohistochemical markers are used. Orcein stain makes it possible to observe the morphological identification of HBsAg.

References

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