

# Disc Diffusion Antibody Sensitivity Testing Using Image Processing and Machine Learning

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**Abstract:** *The aim in many Image Processing applications is to extract important features from image data, from which a description, interpretation, or understanding of the scene can be provided by the machine. Image processing can be defined as, the processing or altering an existing image in a desired manner. This system allows the user to take hard copy of the image using printer routines and allows the user to store screen image into the disk file using file format (bmp, jpg, gif). Image processing in its general form pertains to the alteration and analysis of pictorial information. We find instances of image processing occurring all the time in our daily lives probably the most powerful image processing system is the human brain together with the eye. The system receives, enhances, and stores images at enormous rates of speed. Machine Learning is a booming technology because it benefits every type of business across every industry. The applications are limitless. From healthcare to financial services, transportation to cyber security, and marketing to government, machine learning can help every type of business adapt and move forward in an agile manner. Machine learning allows businesses to collect insights quickly and efficiently, speeding the time to business value. That's why machine learning is important for every organization. Machine learning also takes the guesswork out of decisions A computer has become an essential commodity in every hospital. Everything is computerized today. from open heart surgeries to X-rays to various clinical tests. Everything is carried out efficiently and effectively by the computer. There are many advantages of computers that make it a must have by every medical professional. Thus, we have using computer for getting fast and accurate result for calculating area of inhibition and suggesting medicine by the results. By using this type of technique manual error can be reduce and accurate result can be fetched.*

**Keywords:** Antibody Sensitivity, Machine Learning, Image Processing, Inhibition

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