

**Effect of changing concentration of phenol/chloroform and buffers  
on the amount of DNA recovery in blood samples compared with  
Standard Phenol-Chloroform method for DNA Isolation.**

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**Abstract**

Various protocols for DNA Isolation are in use in various DNA laboratories but there is always a search for an excellent method of isolation of DNA. A good method must be easy with limited steps and yield maximum amount of DNA at the end of isolation. Many standard methods are available in these protocols that we have found in the search for the best method. The standard Phenol-Chloroform Method is one of the most reliable method for isolation of DNA and is used by various laboratories. In our study we tried to find out what is the amount of phenol and chloroform at which the samples yield maximum amount of DNA. Our results show that simply changing the amount of phenol and other solutions can greatly affect the amount of DNA recovery and DNA recovery increases as we increase the amount of phenol. The modified protocol we used in our laboratory yielded good results and the final yield of DNA is increased upto 40% in some samples proving the slightly modified protocol to be superior to the standard phenol-chloroform method.

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