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Next generation sequencing

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The next generation sequencing (NGS) is a revolutionary technology that has transformed the way we study biology. It allows for the rapid and accurate sequencing of large amounts of DNA or RNA. This technology has a wide range of applications, from basic research to clinical diagnostics. In this paper, we will discuss the principles of NGS, its various applications, and the challenges associated with its use. We will also explore the future of NGS and its potential to revolutionize the field of genomics.

Keywords: Next generation sequencing (NGS); SOAP denovo assembly; graph (DBG); SOAP denovo assembly

1. Introduction

1.1. Background study

In the age of information technology, the development of sequencing technology has been rapid. The next generation sequencing (NGS) technology has emerged as a powerful tool for studying the genome. It has a wide range of applications, from basic research to clinical diagnostics. In this paper, we will discuss the principles of NGS, its various applications, and the challenges associated with its use. We will also explore the future of NGS and its potential to revolutionize the field of genomics.