

**ABSTRACT**

5      Provided in the present disclosure are a method and a device for determining a  
fraction of cell free nucleic acids in a biological sample and use thereof, wherein the  
method comprises: (1) sequencing nucleic acids of a biological sample having free  
nucleic acids, in order to obtain sequencing results for a plurality of sequencing data; (2)  
based on the sequencing results, determining the number of nucleic acid molecules with  
a length falling within a preset range in the sample; and (3) based on the number of  
nucleic acid molecules with a length falling within the preset range, determining the  
10      ratio of free nucleic acids in the biological sample.

## ABSTRACT

Provided in the present disclosure are a method and device for determining a ratio of free nucleic acid in a biological sample and use thereof, wherein the method comprises: (1) sequencing nucleic acids of a biological sample having free nucleic acids, in order to obtain sequencing results for a plurality of sequencing data; (2) based on the sequencing results, determining the number of nucleic acid molecules with a length falling within a preset range in the sample; and (3) based on the number of nucleic acid molecules with a length falling within the preset range, determining the ratio of free nucleic acids in the biological sample.