

Dermatology

Rapid reliable method for collection of keratinocyte RNA and DNA samples from children.

Brief Description of Technology

Rapid reliable method for collection of keratinocyte RNA, DNA, microbiome, proteins, lipids, and metabolites.

TECHNOLOGY ID

2016-1006

BUSINESS OPPORTUNITY

Exclusive License

PATENT INFORMATION

Provisional Filed

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Technology Overview

A dissolvable tape has been identified that can be used to isolate RNA, DNA, microbiome, lipids and metabolome. A strong advantage of this technology is that the tape does not need to be removed from the solution when isolating RNA and DNA. In addition, the tape has been used to remove RNA and DNA from children with atopic dermatitis. This method can serve as a non-invasive procedure to assess keratinocyte genes in toddlers. As expected, housekeeping genes as well as skin barrier keratinocyte genes were amplified using quantitative Polymerase Chain Reaction.

Applications

Atopic Dermatitis, Research Tool, Skin Diagnostic, Consumer Product Tool, Skin Research Method

Advantages

The water soluble tape does not need to be removed from the solution and up to 14 consecutive strips was well tolerated in children. The tape can be used to remove RNA, DNA, microbiome, proteins, lipids and metabolites.

Market Overview

Atopic dermatitis (AD) is a commonly occurring condition with differing levels of severity. It occurs equally in males and females and affects an estimated 30 percent of people in the United States. Although atopic dermatitis may occur at any age, it most often begins in infancy and childhood. Ninety percent of all cases of AD are diagnosed in children before the age of 5 and 65% are diagnosed before the age of 1.

Investigator Overview

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