

## USEFUL COMPOSITION IN THE DETECTION OF ALLERGY TO CLAVULANIC ACID

### Description:

Beta-lactam antibiotics are the most common cause of drug allergy, with 10% of the general population being "labeled" as such. This has enormous implications as physicians are faced with the decision to choose an alternative antibiotic treatment, which, although not the first choice, is more expensive and with more side effects. The complex chemical reactivity of clavulanate (CLV) has made the identification of its antigenic determinant difficult. After its conjugation to proteins, the resulting chemical structure is not stable and leads to complex degradation pathways giving rise to multiple possible determinants, which makes it difficult to identify the molecules that make up the antigenic determinant. To solve the need that arises, different synthetic approaches of potential determinants of CLV have been carried out, corresponding to different fragmentations of the drug after its binding to proteins, for its immunological evaluation in in vitro tests. The present invention relates to a composition of clavulanic acid derivatives that allow the diagnosis of CLV allergy.

### Keywords:

[Detection](#), [Diagnosis](#), [Allergy](#), [Clavulanic](#)

### Sectors:

[Biotechnology](#), [Health](#), [Chemistry](#)

### Areas:

[Health Sciences](#), [Diagnosis](#), [Biotechnology](#), [Quality of life](#), [Chemistry](#),  
[Recognition and detection system](#)



### Advantages:

The new synthetic compounds object of patent have the following advantages: - They can be used for in vitro (immunoassay type) and in vivo (skin test) tests for the diagnosis of CLV allergy. - They allow the diagnosis with greater sensitivity. - The ability to confirm allergy to CLV is beneficial for the patient and could translate into great cost savings.

### Uses and Applications:

The present invention is within the field of medicine, pharmacy and biological chemistry, and specifically, a diagnostic method that allows the evaluation of immediate allergic reaction to clavulanic acid with adequate sensitivity.

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