



# Production of an active human AID enzyme in a bacterial system

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## Polish Patent Application

P402440 (14.01.2013, Polish Patent Office)

Title of invention: *Modified gene of human activation-induced cytidine deaminase (AID), a method of modification of human AID gene, a composition showing AID activity, a method of preparation of such composition in a bacterial system, and use of the composition in the analyzes of DNA/RNA amination/deamination and/or methylation/demethylation*

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Assignee: Institute of Bioorganic Chemistry, PAS, Poznań

Application date: 14. 01. 2013

## European Patent Application

PCT/PL2014/000003 (14.01.2014, PCT, WIPO)

Title of invention: *Modified gene of human activation-induced cytidine deaminase (AID), a method of modification of human AID gene, a composition showing AID activity, a method of preparation of such composition in a bacterial system, and use of the composition in the analyzes of DNA/RNA amination/deamination and/or methylation/demethylation*

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## Abstract

The aim of our invention is to characterize a modified gene of human activation-induced cytidine deaminase (*hAID*), a method of modification of *hAID* gene, a composition showing *hAID* activity, and a method of preparation of such composition in a bacterial system. In particular, the invention concerns a modified *hAID* gene for the production of an active enzyme in a bacterial system as well as use of such composition for the analyzes of DNA/RNA amination/deamination, and/or methylation/demethylation.

## Sequence listing

### SEQ. ID No 1

NM\_020661.2\_nt

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CCGCAAGGCTGAGCCCGAGGGGCTGCGGCGGCTGCACCGCGCCGGGTGCAAATAGCCATCATGACCTTCA

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### SEQ. ID No 3

GST-AID\_nt

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**SEQ. ID No 4**

GST-AID\_aa

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