

Absence of Penicillin- derivatives in preparations from *Penicillium* species used in homeopathic medicinal products

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While some species of the genus *Penicillium* do produce antibiotic substances, they are unwanted by-products in the homeopathic use of active substances derived from the *Penicillium* species. The aim of this study was to check for the presence of antibiotic substances in these active substances.

HPLC-ESI-MS data is presented to prove the absence of Penicillin- derivatives and precursors (Penicillin G, m/e 335 [M+H]⁺ and 6-Aminopenicillanic acid, m/e 217 [M+H]⁺) in used active substances. Whilst being found in the fermented culture broth of e.g. *Penicillium chrysogenum*, Penicillin G and 6-Aminopenicillanic acid are no longer present in the active substance after processing. During the manufacture of the active substances, unwanted antibiotic compounds are eliminated whilst preserving the products high quality.

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[1] Bader, G., Akkoyun, A., Wiethoff, K. (2010) *Planta Med.* 76:1262
