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Wir bitten um Zusendung von Belegexemplaren! Danke.

Pressemitteilung

The Basis of an Inflammatory Inhibitor

Human cells have 518 protein kinases which act as signal pathways and are also responsible for disease. Tübingen scientists have developed skepinone-L, an agent which enables individual protein kinases to be selectively inhibited.

Tübingen, 24.01.2012

Protein kinases are promising drug targets for the new medicines of the 21st century. The human genome contains a total of 518 of these enzymes, which are responsible for passing on signals within cells. At least 244 of them play a role when it comes to disease. If a protein kinase goes wrong, it can lead to the growth of tumors or, in the case of auto-immune disorders, constant inflammation.

Until now, a lack of inhibitors with high potency and selectivity *in vivo* has hampered investigation of the p38 mitogen-activated protein kinase (MAPK) signaling pathway. University of Tübingen researchers have now described the design of skepinone-L, which appears to be the first ATP-competitive p38 MAPK inhibitor with excellent *in vi*vo efficacy and selectivity. Therefore, skepinone-L is a valuable probe for chemical biology research, and it may foster the development of a unique class of kinase inhibitors.

Read the full article in *Nature Chemical Biology*:
www.nature.com/nchembio/journal/vaop/ncurrent/full/nchembio.761.html

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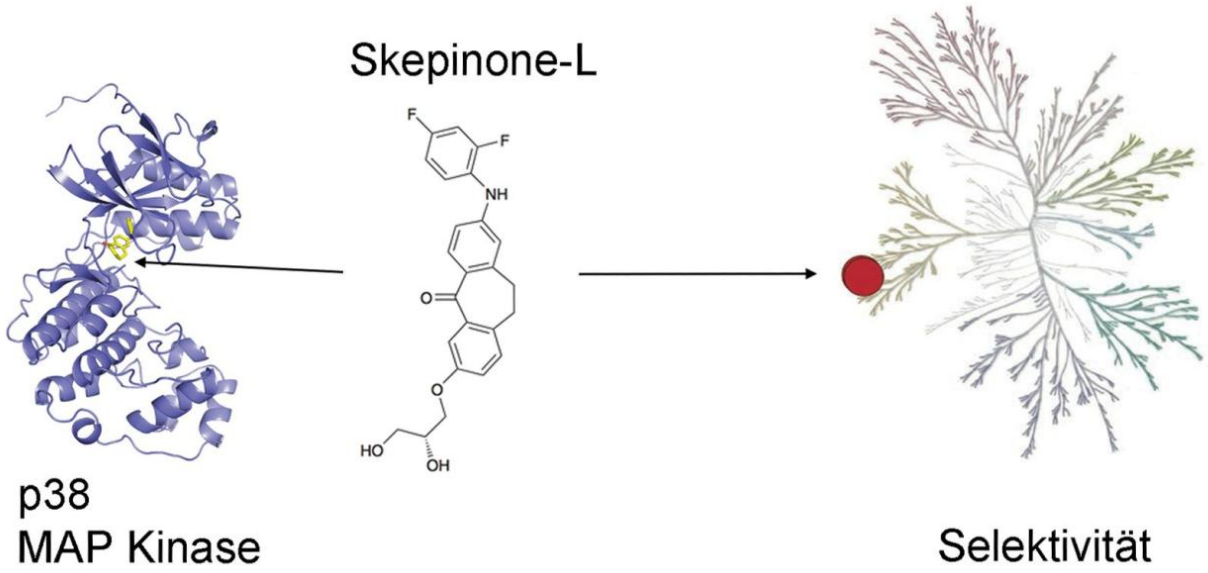

The protein kinase inhibitor Skepinone-L blocks p38 MAP-Kinase (left) and takes a selective effect (right). Diagram: Prof. Thilo Stehle