Friedrich-Alexander-Universität
Erlangen-Nürnberg

Master Thesis: Evaluation of activity of new Sesquiterpenoid modulators on the TRPV1 ion channels and their role in neuronal chemoreception

Department Chemie und Pharmazie, Erlangen, Vollzeit, Befristete Anstellung, Bewerbungsschluss: 31.12.2025

Ihre Aufgaben

The thesis will include evaluation of solubility and biocompatibility of caryophyllene, caryolanol and three caryolanol derivatives (acetate, amide and thiol), followed by the dose-response study of the TRPV1 activity isolated in HEK293 cells. If the time allows, the model system will be evaluated in primary neurons.

The new Sesquiterpenoid modulators are derivatives of caryolanol, which is formed in the body during digestion from caryophyllene and modulates GABAA receptors. Caryolanol and its derivatives could also be promising modulators of the TRPV1 ion channel and may have important role in controlling neuronal processes, such as pain reception.

Interessiert?

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