

Vabilo na Forum40 / Invitation to the Forum40

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Velika predavalnica Kemijskega inštituta/ Great Lecture Hall,
National Institute of Chemistry, Hajdrihova 19, Ljubljana

Unfolding the mechanism of NLP-membrane interaction

Many microbial pathogens produce proteins that are toxic to the cells that they are targeting. Nep1-like proteins (NLPs) are secreted by taxonomically nonrelated microorganisms – bacteria, fungi and oomycetes. Many NLPs cause necrotic lesions of plant tissue and facilitate eudicot plant infection, but are not active against monocots. NLPs are structurally related to pore-forming actinoporins and were shown to induce eudicot plant plasma membrane leakage. Recently, we identified glycosylinositol phosphorylceramides (GIPCs), most abundant plant sphingolipids, as target molecules for NLP's association with plant plasma membrane. However, it remains unclear how the NLPs lyse cell membrane - either via pore-forming mechanism or other type of membrane integrity disruption.

Vljudno vabljeni / Kindly invited