

High-resolution mass spectrometry – a valuable tool for dereplicating marine natural products

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Marbio is a high-throughput platform at the University of Tromsø, Norway, for purification, isolation, screening and identification of novel bioactive compounds from marine organisms. In order to focus the available resources on the most promising lead candidates, a rapid and reliable identification of known compounds is essential. This process is known as dereplication. In Marbio we use high-resolution mass spectrometry to assign the accurate mass and isotope distribution of active compounds from the screening. The elemental composition is calculated and used to search databases in order to eliminate known bioactive compounds from further investigations.