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Galactofuranose-based compounds as potential inhibitors of GlfT1

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The enzyme Galactofuranosyltransferase 1 (GlfT1), initiates the elongation of the Galactan chain of the mycolyl-Arabinogalactan Peptidoglycan (mAGP) complex of the mycobacterial cell wall. mAGP is essential for the microorganism's viability and its Galactan chain backbone is comprised of alternating 5- and 6-linked β -D-Galactofuranose (Galf) units that are not found in humans and thus, enzymes (e.g. GlfT1) involved in its biosynthesis might serve as putative therapeutic targets in diseases such as tuberculosis. Several potential inhibitors resembling the polysaccharide glycan were synthesized and tested against GlfT1.

Biography

Benice Lyrem Joy S Lim is a MS Chemistry student at the University of the Philippines Los Baños. She works as a Research Associate in the laboratory of Dr. Gladys Cherisse J Completo. Her field of interests involves synthetic and Natural products chemistry.

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