ABSTRACT





كلية الزراعة قسم الميكروبيولوجيا الزراعية

البحث الثاني

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فردي مشترك مع آخرين من خارج التخصص _ منشور		

Title	Structure and antiproliferative activity of the polysaccharide from <i>Halomonas aquamarina</i> related to <i>Cobetia pacifica</i> .					
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ABSTRACT

Here, the results of the structure and the activity of capsular polysaccharides isolated from the *Halomonas aquamarina* EG27S8QL and *Cobetia pacifica* KMM3878 have been described. Both polysaccharides were studied by spectroscopic and chemical methods and were found to be structurally related sulfated galactans differing in the position of the sulfate group:

 $\rightarrow 6) - \beta - D - Galp 3S - (1 \rightarrow 4) - \beta - D - Galp 3S - (1 \rightarrow 6) - \beta - D - Galp 3, \\ 4(S - Pyr) - (1 \rightarrow \ [H.\ aquamarina\ EG27S8QL]$

 \rightarrow 6)- β -D-Gal-(1 \rightarrow 4)- β -D-Gal2,3S-(1 \rightarrow 6)- β -D-Gal3,4(S-Pyr)-(1 \rightarrow [C. pacifica KMM3878].

Structure of the CPS from *H. aquamarina* EG27S8QL has not been hitherto reported, whereas the CPS from *C. pacifica* KMM3878 was identical to the previously studied O-polysaccharide. The CPSs exhibited an antiproliferative effect and suppressed the colony formation of DLD-1 and MCF-7 cells in a different manner.