Accepted Manuscript

Title: Two novel polysaccharides from the torus of *Saussurea laniceps* protect against AAPH-induced oxidative damage in human erythrocytes

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PII: S0144-8617(18)30906-8

DOI: https://doi.org/10.1016/j.carbpol.2018.08.007

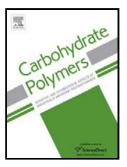
Reference: CARP 13904

To appear in:

Received date: 14-6-2018 Revised date: 3-8-2018 Accepted date: 3-8-2018

Please cite this article as: Chen W, Ma J, Gong F, Xi H, Zhan Q, Li X, Wei F, Wu H, Lai F, Two novel polysaccharides from the torus of *Saussurea laniceps* protect against AAPH-induced oxidative damage in human erythrocytes, *Carbohydrate Polymers* (2018), https://doi.org/10.1016/j.carbpol.2018.08.007

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ACCEPTED MANUSCRIPT

Two novel polysaccharides from the torus of Saussurea laniceps protect against AAPH-induced oxidative damage in human erythrocytes

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Highlights

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- •Two novel polysaccharides (SLT-3, SLT-4), were extracted from Saussurea laniceps.
- The study confirms the presence of acidic polysaccharides in *Saussurea laniceps*.
- •SLT-3 and SLT-4 exhibited noticeable antioxidant ability.
- •The damage to erythrocyte membrane structure was alleviated by SLT-3 and SLT-4.

ABSTRACT

Two major polysaccharides (SLT-3, SLT-4) were isolated from the torus of Saussurea laniceps. Their molecular weight, monosaccharide compositions and the ability to protect human erythrocytes from oxidative damage induced by AAPH were assessed. Results showed that the Mw of SLT-3 and SLT-4 were 10113 Da and 12392 Da. SLT-3 was composed of mannose, rhamnose, glucuronic acid, galacturonic acid, glucose, galactose, xylose, and arabinose in a molar ratio of 0.25:0.53:0.19:15.35:0.51:1.10:0.63:1.73, whereas SLT-4 was composed of mannose, rhamnose, glucuronic acid, galacturonic acid, glucose, galactose, and arabinose in a

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