

Assessment of Heparanase-Mediated Angiogenesis using Microvascular Endothelial Cells: Identification of λ -Carrageenan Derivative as a Potent Anti Angiogenic Agent

Nicolas Poupard ¹, Pamela Badarou ², Fabienne Fasani ², Hugo Groult ¹, Nicolas Bridiau ¹, Frédéric Sannier ¹, Stéphanie Bordenave-Juchereau ¹, Claudine Kieda ², Jean-Marie Piot ¹, Catherine Grillon ², Ingrid Fruitier-Arnaudin ^{1,*†} and Thierry Maugard ^{1†}

¹ Université de la Rochelle, UMR CNRS 7266, LIENSs, Equipe Approches Moléculaires, Environnement-Santé, Avenue Michel Crépeau, 17000 La Rochelle, France; nicolas.poupard@univ-lr.fr (N.P.); hugo.groult@univ-lr.fr (H.G.); nicolas.bridiau@univ-lr.fr (N.B.); frederic.sannier@univ-lr.fr (F.S.); stephanie.bordenave@univ-lr.fr (S.B.); jean-marie.piot@univ-lr.fr (J.P.); thierry.maugard@univ-lr.fr (T.M.);

² Centre de Biophysique Moléculaire, UPR CNRS 4301, 45071 Orléans, France; ayobadarou@hotmail.fr (P.B.); fabienne.fasani@cnrs-orleans.fr (F.F.); claudine.kieda@cnrs-orleans.fr (C.K.); catherine.grillon@cnrs-orleans.fr (C.G.)

* Correspondence: ingrid.fruitier@univ-lr.fr (I.F.); Tel.: +33-546-458-562; Fax: +33-546-458-277

† These authors contributed equally to this work.

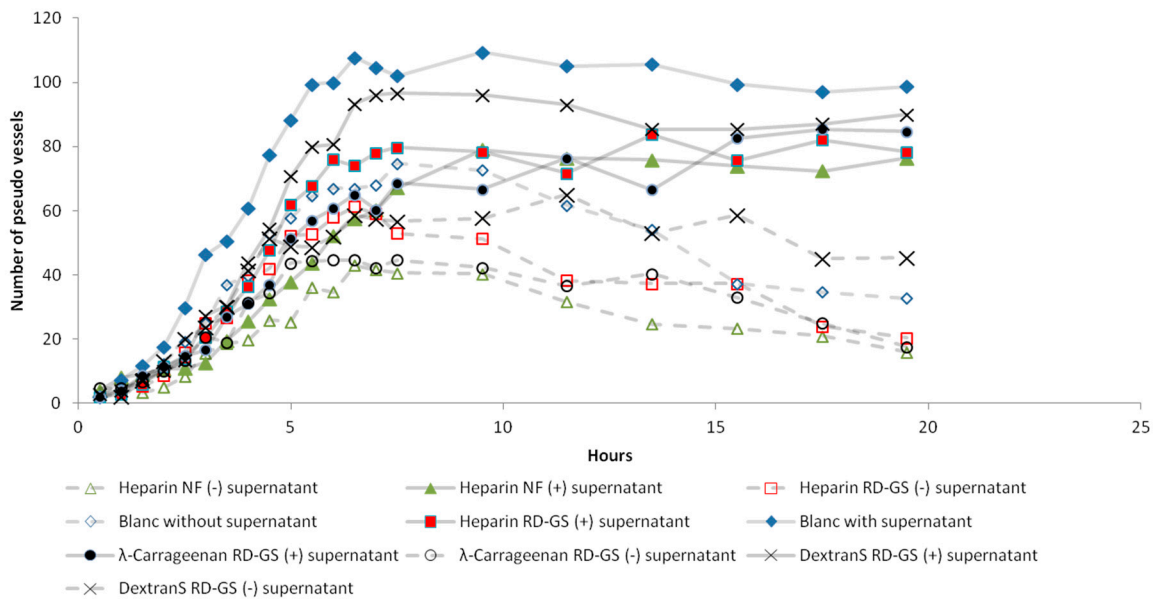


Figure S1: Complete Kinetic of the number of pseudo vessels formation from 0h to 20h. Each polysaccharide is described in the conditions with FBS-free medium (-) supernatant) or with medium supplemented with MCF-7 supernatant ((+) supernatant). Each point represent the average value of a triplicate

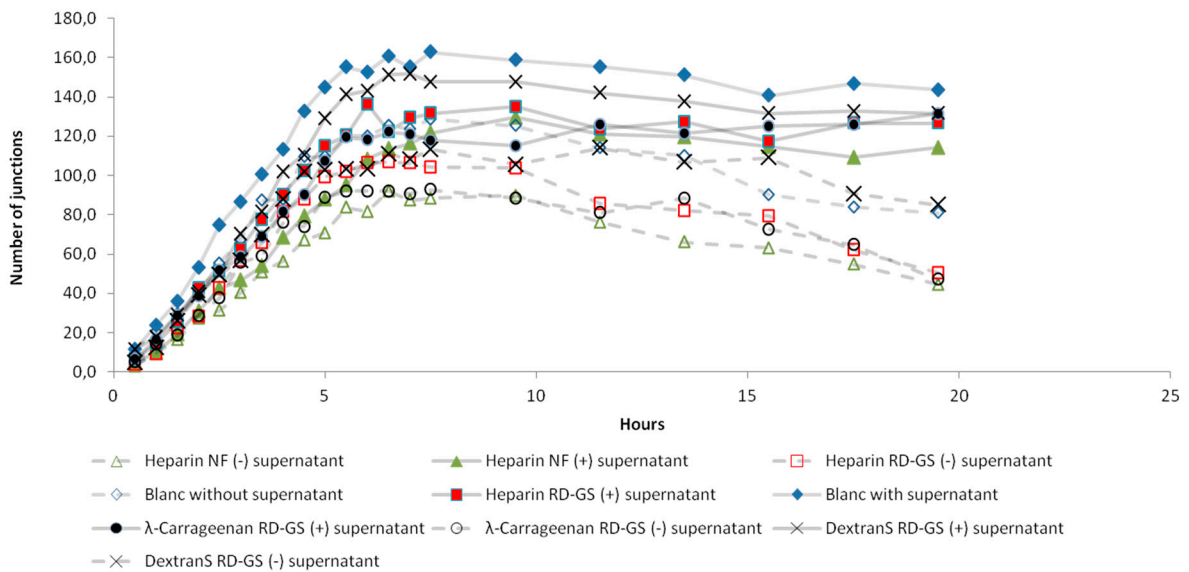


Figure S2: Complete Kinetic of the junctions formation from 0h to 20h. Each polysaccharide is described in the conditions with FBS-free medium (-) supernatant) or with medium supplemented with MCF-7 supernatant ((+) supernatant). Each point represent the average value of a triplicate

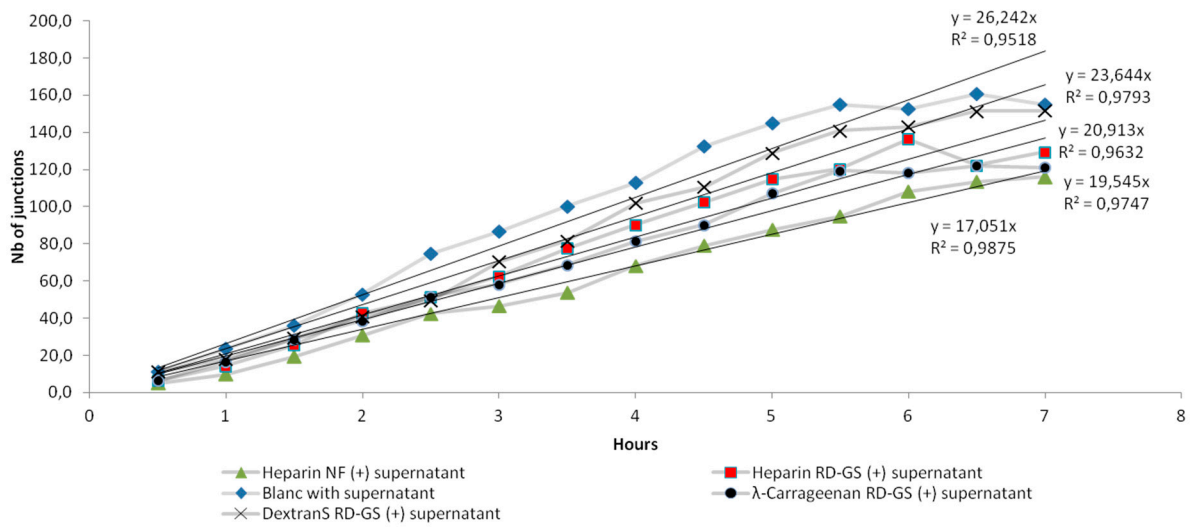


Figure S3: Slopes determined with linear regression of the number of junctions formed between 0h and 7h with each polysaccharide tested in medium supplemented with MCF7-supernatant. Each point represent the average value of a triplicate

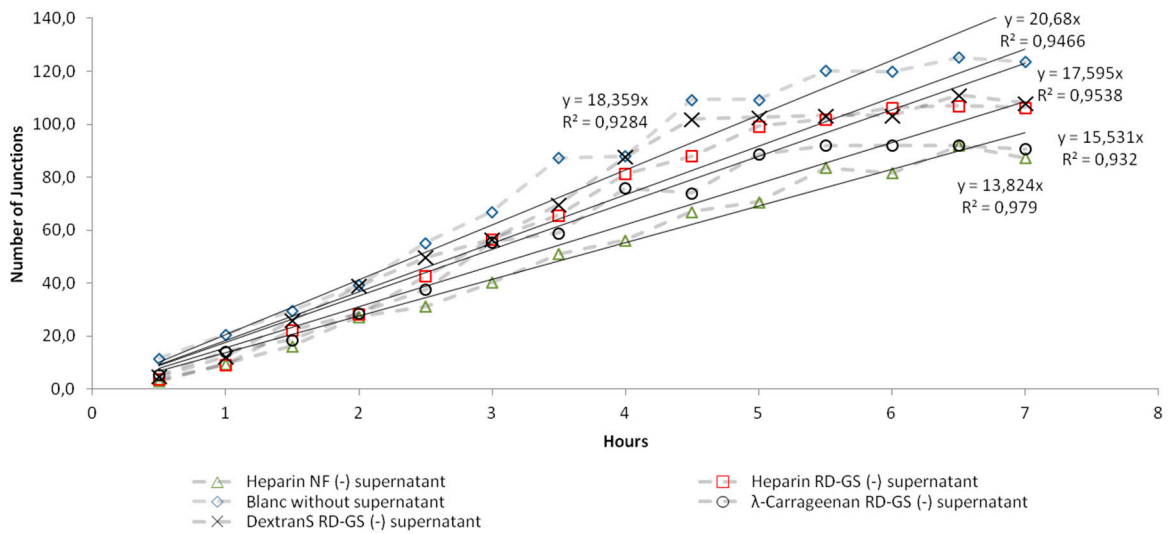


Figure S4: Slopes determined with linear regression of the number of junctions formed between 0h and 7h with each polysaccharide tested in FBS-free medium. Each point represent the average value of a triplicate

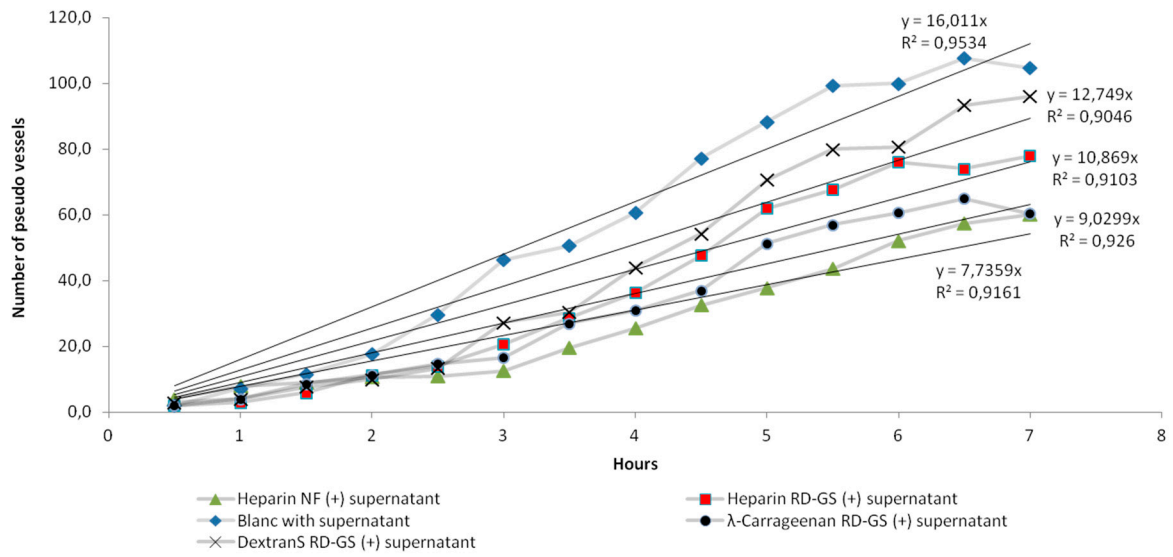


Figure S5: Slopes determined with linear regression of the number of pseudo vessels formed between 0h and 7h with each polysaccharide tested in medium supplemented with MCF7-supernatant. Each point represent the average value of a triplicate.

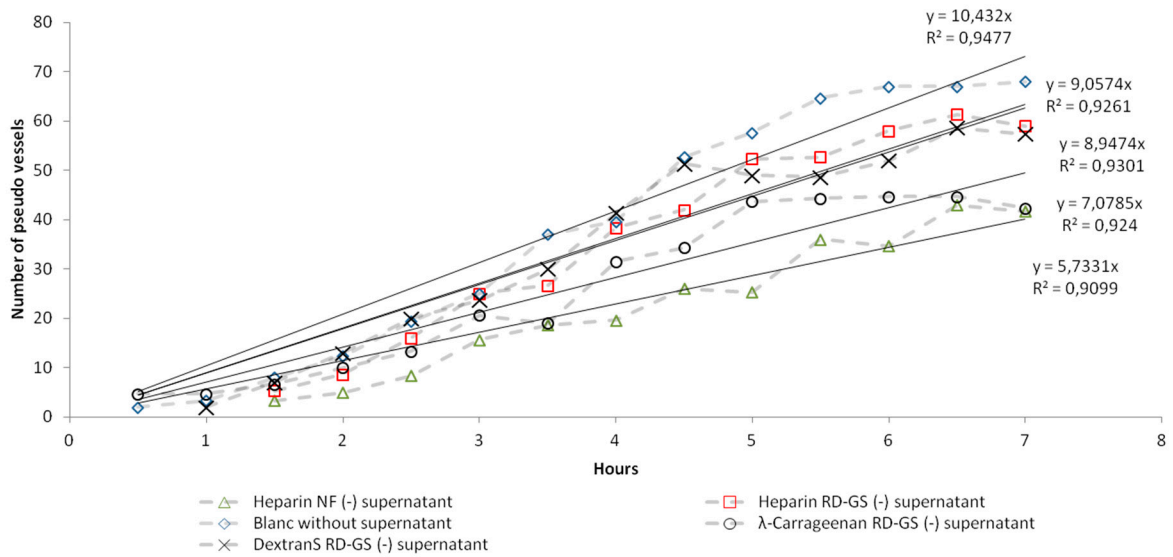


Figure S6: Slopes determined with linear regression of the number of pseudo vessels formed between 0h and 7h with each polysaccharide tested in in FBS-free medium. Each point represent the average value of a triplicate