



## Lepidotol A from *Mesua lepidota* inhibits inflammatory and immune mediators in human endothelial cells

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Titre	Lepidotol A from <i>Mesua lepidota</i> inhibits inflammatory and immune mediators in human endothelial cells
Type de publication	Article de revue
Auteur	Rouger, Caroline [1], Derbré, Séverine [2], Charreau, Béatrice [3], Pabois, Angélique [4], Cauchy, Thomas [5], Litaudon, Marc [6], Awang, Khalijah [7], Richomme, Pascal [8]
Pays	Etats-Unis
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Résumé en anglais	<p>Phytochemical investigation on the fruits of <i>Mesua lepidota</i> (Calophyllaceae) led to the isolation of seven new phenylcoumarin derivatives named lepidotols A-E (1-5) and lepidotins A and B (6, 7). These structures were elucidated by spectroscopic and spectrometric methods including UV, NMR, and HRMS. Lepidotol A (1), the major compound, was evaluated for its inhibitory effect on inflammation and immunity using endothelial cell-based cellular assays. At 10 <math>\mu</math>M, 1 exhibited an anti-inflammatory activity, with a significant inhibition of vascular cell adhesion molecule 1 and intercellular adhesion molecule 1 expression induced by tumor necrosis factor-<math>\alpha</math>. Lepidotol A also showed a mild immunosuppressive effect, with inhibition of the major histocompatibility complex molecules, namely, human leukocyte antigen (HLA)-DR and HLA-E.</p>
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### Liens

[1] <http://okina.univ-angers.fr/carouger/publications>

[2] <http://okina.univ-angers.fr/severine.derbre/publications>

- [3] [http://okina.univ-angers.fr/publications?f\[author\]=17375](http://okina.univ-angers.fr/publications?f[author]=17375)
- [4] [http://okina.univ-angers.fr/publications?f\[author\]=24495](http://okina.univ-angers.fr/publications?f[author]=24495)
- [5] <http://okina.univ-angers.fr/thomas.cauchy/publications>
- [6] [http://okina.univ-angers.fr/publications?f\[author\]=62](http://okina.univ-angers.fr/publications?f[author]=62)
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- [9] <http://okina.univ-angers.fr/publications/ua14489>
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