



Contents lists available at ScienceDirect

European Journal of Medicinal Chemistry

journal homepage: <http://www.elsevier.com/locate/ejmech>



Original article

Cytotoxic and protective DNA damage of three new diterpenoids from the brown alga *Dictyota dichotoma*

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ARTICLE INFO

Article history:

Received 23 September 2010

Received in revised form

27 October 2010

Accepted 31 October 2010

Available online 4 November 2010

Keywords:

Brown algae

Dictyota dichotoma

Diterpenoids

DNA damage

Cytotoxicity

Antioxidant

ABSTRACT

Three new diterpenes Amijiol acetate (**3**), dolabellane, Dolabellatrienol (**4**), and dolastane, Amijiol-7, 10-diacetate (**9**) were isolated together with the previously described Pachydictyol A (**1**), Isopachydictyol A (**2**), 8 β -hydroxypachydictyol A (**5**), Amijiol (**6**), Isodictyohemiacetal (**7**) and Dictyol C (**8**) from the Red Sea brown alga *Dictyota dichotoma* var. *implexa*. The structures and relative stereochemistry of the new diterpenoids were proposed on the basis of their spectral data. Compounds **3** and **9** have potent activity against DNA damage, cytotoxicity against WI-38, HepG2, and MCF-7 cell lines, and antioxidant using ABTS and erythrocytes hemolysis.

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