

Browser tabs: Cateia, R La Re, Cateia, Faceit, Gam, E-Se, catia, Carre, Man, Web, InCiti, InCiti, Dual, Cateia

Address bar: <https://www.ncbi.nlm.nih.gov/pubmed/25002232>

Bookmarks: Aplicações, Universidae Atlântic, Caixa de Entrada (55), Faculdade de Farmá, Save to Mendeley, Facebook, Microsoft Outlook W, SNESup - Sindicato, METEOPROG.COM.P

NCBI Resources How To

Not signed
<https://www.ncbi.nlm.nih.gov/account/>

PubMed
US National Library of Medicine
National Institutes of Health

Format: Abstract -

Send to -

Bioorg Med Chem. 2014 Aug 1;22(15):3887-90. doi: 10.1016/j.bmc.2014.06.019. Epub 2014 Jun 18.

Dual-stage triterpenoids from an African medicinal plant targeting the malaria parasite.

Ramalhete C¹, da Cruz FP², Mulhovo S³, Sousa LJ⁴, Fernandes MX⁵, Prudêncio M², Ferreira MJ⁶.

Author information

Abstract
Sixteen triterpenoids (1-16), previously isolated from the aerial parts of the African medicinal plant *Momordica balsamina* or obtained by derivatization, were evaluated for their activity against liver stages of *Plasmodium berghei*, measuring the luminescence intensity in Huh-7 cells infected with a firefly luciferase-expressing *P. berghei* line, PbGFP-Lucifer. Toxicity of compounds (1-16) was assessed on the same cell line through the fluorescence measurement of cell confluency. The highest activity was displayed by a derivative bearing two acetyl residues, karavoate B (7), which led to a dose-dependent decrease in the *P. berghei* infection rate, exhibiting a very significant activity at the lowest concentration employed (1 µM) and no toxicity towards the Huh-7 cells. It is noteworthy that, in previous studies, this compound was found to be a strong inhibitor of blood-stages of *Plasmodium falciparum*, thus displaying a dual-stage antimalarial activity.

KEYWORDS: Antimalarials; Dual stage; *Momordica balsamina*; *Plasmodium berghei*; Triterpenoids

PMID: 25002232 DOI: 10.1016/j.bmc.2014.06.019
[Indexed for MEDLINE]

Publication type, MeSH terms, Substances

Full text links
ELSEVIER
FULL-TEXT ARTICLE

Save items
Add to Favorites

Similar articles
Triterpenoids as inhibitors of erythrocytic and liver stages of *Plasmodium* [Bioorg Med Chem. 2011]
New antimalarials with a triterpenic scaffold from *Momordica balsamina*. [Bioorg Med Chem. 2010]
In vivo evaluation of isolated triterpenes and semi-synthetic derivative [Eur J Med Chem. 2015]
Recent developments in antimalarial natural products isolat [Mini Rev Med Chem. 2013]
Diosgenone synthesis, anti-malarial activity and QSAR of analogues [Molecules. 2013]

See reviews...
See all...

Taskbar: hp, Chrome, S, File Explorer, Word, PDF Reader, System Tray: 11:15, 28/08/2018