

Title (en)
APICOMPLEXAN PATHWAYS, INHIBITORS, AND DRUG DELIVERY

Title (de)
APICOMPLEXAN-WEGE, INHIBITOREN UND WIRKSTOFFZUFHRUNG

Title (fr)
VOIES D'APICOMPLEXAN, INHIBITEURS ET ADMINISTRATION DE MEDICAMENTS

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Application
EP 03788516 A 20030814

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Abstract (en)
[origin: WO2004016220A2] An apicomplexan Fab I gene and the gene for DAHP synthase in *Toxoplasma gondii*, and their encoded enzymes, provide means to rationally design novel inhibitory compositions useful for prevention and treatment of apicomplexan related diseases. For example, triclosan is a lead compound. Delivery of inhibitors to microorganisms by short amino acid polymers demonstrates a novel method to treat active infections, and demonstrates a new approach for delivering antimicrobials to encysted, latent parasites. The shikimate pathway is essential for survival of the apicomplexan parasites *Plasmodium falciparum*, *Toxoplasma gondii* and *Cryptosporidium parvum*. Because it is absent in mammals, it is an appealing therapeutic target. Genes encoding the shikimate pathway enzymes in *T. gondii* are described. Putative AOX sequences were identified and sequenced from both type 1 and type 2 strains of *C. parvum*. The gene encodes a polypeptide of 336 amino acids and has a predicted N-terminal transit sequence similar to that found in proteins targeted to the mitochondria of other species. Alternative oxidase (AOX) is another target for new anti-microbial agents for *C. parvum*.

IPC 8 full level
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C12N 9/001 (2013.01); **C12N 9/88** (2013.01); **C12Q 1/18** (2013.01); **Y02A 50/30** (2017.12)

Citation (search report)

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