

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

Title (de)
APICOMPLEXAN-WEGE, INHIBITOREN UND WIRKSTOFFZUF HRUNG

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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Citation (search report)

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