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(54) Title: CYCLIC NUCLEOTIDE-SPECIFIC PHOSPHODIESTERASES FROM LEISHMANIA AND USES THEREOF

(57) Abstract: The present invention relates to novel amino acid and nucleic acid sequences of cyclic nucleotide-specific phosphodiesterases from the parasite *Leishmania major*. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences as well as methods for producing and using the amino acid and nucleic acid sequences. The invention further relates to the use of these sequences, and of antibodies directed against these sequences, in the diagnosis and treatment of disorders related to the infection of *Leishmania major*, including the identification of compounds that form complexes with the polypeptides and nucleic acids of the present invention.



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