

Functional and structural characterization of the unique bifunctional enzyme complex involved in regulation of polyamine metabolism in *Plasmodium falciparum*

by

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ABBREVIATIONS

3D	Three-dimensional
Α	Adenosine
ACD	Available chemicals directory
AdoMet	S-adenosylmethionine
AdoMetDC	S-adenosylmethionine decarboxylase
AMA	Apical membrane antigen
AMP	Adenosine monophosphate
ATP	Adenosine triphosphate
AzBE	Antizyme binding element
bp	Base pair
BCBD	N ¹ N ⁴ -bis(7-chloroquinoline-4-yl)butane-1,4-diamine
BLAST	Basic local alignment search tool
BSA	Bovine serum albumin
С	Cytosine
cAMP	Cyclic adenosine monophosphate
CARP	Clustered Asp rich protein
CCD	Charge coupled devise
cDNA	Complementary DNA
CSD	Cambridge structure database
CS	Circumsporozoïte
C-terminal	Carboxy terminal
dAdoMet	Decarboxylated S-adenosylmethionine
dNTP	Deoxyribonucleotide triphosphate
DD-Poly-T	Differential display poly-T primer
DDT	Dichlorodiphenyltrichloro ethane
ddUTP	Dideoxyuridine triphosphate
DEPC	Diethyl pyrocarbonate
DHFR	Dihydrofolate reductase
DHODH	Dihydroorotate dehydrogenase
DHPS	Dihydropteroate synthetase
DIG	Digoxigenin
DMF	Dimethylformamide
DMFO	DL-a-difluoromethyl ornithine
DMSO	Dimethylsulphoxide
DNA	Deoxyribonucleic acid
DNAse	Deoxyribonuclease
dNTP	Deoxynucleotide triphosphate
ds	Double-stranded
DTT	Dithiotreitol
dUTP	Deoxyuridine triphosphate
EBA	Erythrocyte binding protein
EDTA	Ethanol diamine tetra-acetic acid
EtBr	Ethidium Bromide
FP	Ferriprotoporphyrin IX



G	Guanidine
G6-PD	Glucose-6-phosphate dehydrogenase
GM-CSF	Granulocyte macronhage colony stimulating factor
GPI	Glycophosphatidyl inositol
GPASD	Graphical concentration and analyses of structural properties
CSD	Companical representation and analyses of structural properties
CTT	Gene specific primer
GIP	Guanidine triphosphate
HABA	4-hydroxy azobenzene-2-carboxylic acid
HGPRT	Hypoxanthine-guanosine phosphoribosyltransferase
HIV	Human immunodeficiency virus
HRP	Histidine rich protein or horseradish peroxidase
HSP	Heat shock protein
	•
Ι	Inosine
ICAM	Intracellular adhesion molecule
IFN	Interferon
Π	Interleykin
	Immobilized metal offinity chrometography
	Isopropyi-D-galactoside
IOBWR	International Union for Biochemistry and Molecular Biology
KD	Kilobase/kilobasepairs
LB	Luria Berthani
LDH	Lactate dehydrogenase
LD-PCR	Long-distance PCR
MAOPA	5'-[(3aminooxypropyl)methylamino]-5'-deoxyadenosine
MDR	Multi-drug resistance
MGBG	Methylglyoxal bis(guanylhydrazone)
MHC	Major histocompatibility complex
MI	Match index
monn-DFB	1-methyl-3-oxo-3-phenyl difluoridoborate
MOPS	Mornholinopropanegulphonic acid
mPNA	Mersenger DNA
MSA	Merozoïto surface enticon
MBA	Merozoite surface antigen
NIDT	Nitrohlus tetrarolium ablasida
NODI	Nitrodiue tetrazonum chioride
NCBI	National Center for Biotechnology Information
NCI	National Cancer Institute (USA)
N1-NTA	Nickel-nitrolotriacteric acid
NMR	Nuclear magnetic resonance
NO	Nitric oxide
NOS	Nitric oxide synthase
nt	Nucleotide
N-terminal	Amino terminal
OAT	Ornithine aminotransferase
OD	Optical density
	F

1



ODC	Ornithine decarboxylase
ORF	Open reading frame
PASS	Prediction of the biological activity spectra of substances
PBS	Phosphate buffered saline
PCR	Polymerase chain reaction
PDB	Protein databank
PEG	Poly_ethylene glycol
PfA doMetDC	101y-curyione grycor
Induncuo	dependence
Dfort	ablere mine existence transmenter
	Chloroquine resistance transporter
PIEMP DID DOD	P. jaiciparium-infected erythrocyte membrane protein
PIK-PSD	Protein information resource-protein sequence database
PLP	Pyridoxal 5'-phosphate
PMSF	Phenylmethylsulfonyl fluoride
PPMP	dl-threo-1-phenyl-2-palmitoylamino-3-morpho-1-propanol
PPP	Pentose phosphate pathway
PPPK	Dihydroxymethylpterin pyrophosphokinase
PVM	Parasitophorous vacuolar membrane
	-
RACE	Rapid amplification of cDNA ends
RAP1	Rhoptry-associated protein
RMSD	Root mean square deviation
RNA	Ribonucleic acid
RNAse	Ribonuclease
RR-MAP	Methylacetylenicnutrescine
RT	Reverse transcription
RT_PCP	Reverse transcription
	Reverse transcription FCR
SCOP	Structural algorification of protoing
SUC	Sodium Dodewil Sulphoto
SDS DACE	SDS Delyagerilemide gel electrophonesie
SDS-FAGE	SDS-Polyaci ylamide gel electrophoresis
SE-FFLC	Size-exclusion fast protein liquid chromatography
SE-HPLC	Size-exclusion high-pressure liquid chromatography
SMAKI	Simple modular architecture research tool
STARP	Sporozoite Thr and Asp rich protein
_	
Т	Thymidine
t _{1/2}	Half-life
T _m	Melting temperature
TAE	Tris-acetate EDTA
TBS	Tris buffered sodium
TE	Tris EDTA buffer
TEMED	N,N,N',N'-tetramethylethylenediamine
TIM	Triosephosphate isomerase
TMAC	Trimethylammonium chloride
TNF a	Tumor necrosis factor α
TS	Thymidylate synthetase
TVM	Tubovesicular membrane network
	A GOO TOOIQUI AIIOIIUI AIIO IIGLWUIK
ITTR	Untranslated region
IIV	I Iltravialet
N/ T	



- VCAM Vascular cell adhesion molecule
- WHO World Health Organisation
- X-gal 5-bromo-4-chloro-indolyl-β-D-galactoside