

Supplementary Material 1

Parasite Antigens				
species	protein	protection	swiss-prot	Reference
Plasmodium falciparum	Merozoite surface protein 1	yes	O15808	Singh <i>et al.</i> , Infect. Immun. 2006, 74, 4573-80.
Babesia bovis	Thrombospondin-related anonymous protein	yes	Q6JH13	Brown <i>et al.</i> , Parasite Immunol. 2006, 28, 315-27.
Babesia bovis	Apical membrane antigen 1	yes	Q6RXY4	Brown <i>et al.</i> , Parasite Immunol. 2006, 28, 315-27.
Babesia bovis	Rhoptry associated protein 1	yes	Q27396	Brown <i>et al.</i> , Parasite Immunol. 2006, 28, 315-27.
Babesia bovis	Merozoite surface antigen 2a1	yes	Q3LUQ3	Brown <i>et al.</i> , Parasite Immunol. 2006, 28, 315-27.
Babesia bovis	Merozoite surface antigen 2a2	yes	Q3LUQ2	Brown <i>et al.</i> , Parasite Immunol. 2006, 28, 315-27.
Babesia bovis	Merozoite surface antigen 2b	yes	Q3LUQ1	Brown <i>et al.</i> , Parasite Immunol. 2006, 28, 315-27.
Babesia bovis	Merozoite surface antigen 2c	yes	Q3LUP5	Brown <i>et al.</i> , Parasite Immunol. 2006, 28, 315-27.
Babesia bovis	Merozoite surface antigen-1	yes	Q9BHA2	Brown <i>et al.</i> , Parasite Immunol. 2006, 28, 315-27.
Babesia bigemina	Rap-1 alpha	yes	O15709	Brown <i>et al.</i> , Parasite Immunol. 2006, 28, 315-27.
Babesia bigemina	Merozoite surface glycoprotein gp45	yes	Q9GN06	Brown <i>et al.</i> , Parasite Immunol. 2006, 28, 315-27.
Babesia divergens	Glycosylphosphatidylinositol-anchored merozoite surface protein	yes	Q8IHK7	Brown <i>et al.</i> , Parasite Immunol. 2006, 28, 315-27.
Plasmodium falciparum	Apical membrane antigen 1	yes	Q94661	Miao <i>et al.</i> , Vaccine 2006, in press.
Leishmania major	GP63	yes	Q4QHG9	Khamesipour <i>et al.</i> , Indian J. Med. Res. 2006, 123, 423-38.
Leishmania major	Guanine nucleotide-binding protein subunit beta-like protein	yes	Q25306	Khamesipour <i>et al.</i> , Indian J. Med. Res. 2006, 123, 423-38.
Leishmania major	Histone H1	yes	Q9TVI8	Khamesipour <i>et al.</i> , Indian J. Med. Res. 2006, 123, 423-38.
Leishmania major	Histone H2A	yes	Q4QEG6	Khamesipour <i>et al.</i> , Indian J. Med. Res. 2006, 123, 423-38.
Leishmania major	Histone H2B	yes	Q9BJC7	Khamesipour <i>et al.</i> , Indian J. Med. Res. 2006, 123, 423-38.
Leishmania major	Histone H3	yes	Q4QHB5	Khamesipour <i>et al.</i> , Indian J. Med. Res. 2006, 123, 423-38.
Leishmania major	Histone H4	yes	Q9GRP6	Khamesipour <i>et al.</i> , Indian J. Med. Res. 2006, 123, 423-38.
Leishmania major	Cysteine proteinase A	yes	Q4QD68	Khamesipour <i>et al.</i> , Indian J. Med. Res. 2006, 123, 423-38.
Leishmania major	Cysteine proteinase B	yes	Q5ZQK2	Khamesipour <i>et al.</i> , Indian J. Med. Res. 2006, 123, 423-38.
Leishmania major	Stage-specific S antigen-like protein	yes	Q8MLY1	Khamesipour <i>et al.</i> , Indian J. Med. Res. 2006, 123, 423-38.
Leishmania donovani	HASPB1 protein	yes	O77301	Khamesipour <i>et al.</i> , Indian J. Med. Res. 2006, 123, 423-38.
Leishmania infantum	22 kDa potentially aggravating protein papLe22	yes	Q9NJS2	Khamesipour <i>et al.</i> , Indian J. Med. Res. 2006, 123, 423-38.
Schistosoma mansoni	Sm29	yes	O96368	Cardoso <i>et al.</i> , Clin. Exp. Immunol. 2006, 144, 382-91.
Brucella abortus	6,7-dimethyl-8-ribityllumazine synthase	yes	Q2YKV1	Rosas <i>et al.</i> , Microbes Infect. 2006, 8, 1277-86.
Schistosoma japonicum	Very low density lipoprotein binding protein	yes	Q9U8F4	Gan <i>et al.</i> , Mem. Inst. Oswaldo Cruz 2006, 101, 9-13.
Clonorchis sinensis	Fatty acid-binding protein	yes	Q8MUC1	Lee <i>et al.</i> , Scand. J. Immunol. 2006, 63, 169-76.
Leishmania major	Signal peptidase type I	yes	Q8ISG0	Rafati <i>et al.</i> , Vaccine 2006, 24, 3290-7.
Schistosoma japonicum	Paramyosin	yes	Q05870	Zhang <i>et al.</i> , Parasite Immunol. 2006, 28, 77-84.
Entamoeba histolytica	Gal/GalNAc lectin IgI1	yes	Q964D2	Petri <i>et al.</i> , Arch. Med. Res. 2006, 37, 288-91.
Toxoplasma gondii	Cyst matrix protein	yes	Q9NBD2	Nielsen <i>et al.</i> , Exp. Parasitol. 2006, 112, 274-9.
Toxoplasma gondii	Hsp30/bag1 protein	yes	Q27354	Nielsen <i>et al.</i> , Exp. Parasitol. 2006, 112, 274-9.

Schistosoma mansoni	Glutathione S-transferase 28 kDa	yes	P09792	Li <i>et al.</i> , Acta Biochim. Biophys. Sin. 2005, 37, 751-8.
Leishmania infantum	60S acidic ribosomal protein P0	yes	P39097	Iborra <i>et al.</i> , Infect Immun. 2005, 73, 5842-52.
Taenia saginata	Tsa-9 protein	yes	O76993	Hein <i>et al.</i> , Vet. Parasitol. 2005, 132, 217-22.
Taenia saginata	Tsa-18 protein	yes	O76992	Hein <i>et al.</i> , Vet. Parasitol. 2005, 132, 217-22.
Taenia solium	Activated oncosphere TSOL18	yes	O96346	Hein <i>et al.</i> , Vet. Parasitol. 2005, 132, 217-22.
Echinococcus granulosus	EG95 host-protective vaccine antigen	yes	Q24797	Hein <i>et al.</i> , Vet. Parasitol. 2005, 132, 217-22.
Haemonchus contortus	Hidden antigen h11	yes	Q86G73	Hein <i>et al.</i> , Vet. Parasitol. 2005, 132, 217-22.
Taenia solium	Activated oncosphere TSO45-1A	yes	Q9BH49	Gonzalez <i>et al.</i> , Am. J. Trop. Med. Hyg. 2005, 72, 837-9.
Haemonchus contortus	Cysteine protease	yes	Q25029	Knox <i>et al.</i> , Parasite Immunol. 2005, 27, 121-6.
Plasmodium vivax	Merozoite surface protein 1	yes	Q217F0	Barrero <i>et al.</i> , Vaccine 2005, 23, 4048-53.
Plasmodium vivax	Tryptophan-rich antigen	yes	Q6PZ53	Jalah <i>et al.</i> , Mol. Biochem. Parasitol. 2005, 142, 158-69.
Babesia gibsoni	P50 protein	yes	Q966V8	Fukumoto <i>et al.</i> , Clin. Diagn. Lab. Immunol. 2005, 12, 557-9.
Leishmania donovani	Ribosomal protein P1-like protein	yes	Q8I867	Arora <i>et al.</i> , Exp. Parasitol. 2005, 109, 163-70.
Leishmania donovani	Nucleoside hydrolase-like protein	yes	Q18L65	Be <i>et al.</i> , Infect. Immun. 2005, 73, 812-9.
Toxoplasma gondii	Micronemal protein MIC2	yes	O00816	Beghetto <i>et al.</i> , J. Infect. Dis. 2005, 191, 637-45.
Toxoplasma gondii	Micronemal protein 4	yes	Q9XZH7	Beghetto <i>et al.</i> , J. Infect. Dis. 2005, 191, 637-45.
Toxoplasma gondii	Apical membrane antigen 1 homolog	yes	O15681	Beghetto <i>et al.</i> , J. Infect. Dis. 2005, 191, 637-45.
Toxoplasma gondii	MIC2-associated protein	yes	Q967S9	Beghetto <i>et al.</i> , J. Infect. Dis. 2005, 191, 637-45.
Brugia malayi	Abundant larval transcript-2 protein	yes	P90708	Ramachandran <i>et al.</i> , Microbiol. Immunol. 2004, 48, 945-55.
Trypanosoma cruzi	Glycosylphosphatidylinositol (GPI) anchor	yes	Q4DPU1	Bhatia <i>et al.</i> , Infect. Immun. 2004, 72, 6245-54.
Schistosoma mansoni	Superoxide dismutase [Cu-Zn]	yes	Q01137	LoVerde <i>et al.</i> , Mem. Inst. Oswaldo Cruz, 2004, 99, 37-43.
Schistosoma mansoni	Extracellular superoxide dismutase [Cu-Zn]	yes	P16026	LoVerde <i>et al.</i> , Mem. Inst. Oswaldo Cruz, 2004, 99, 37-43.
Schistosoma mansoni	Glutathione peroxidase	yes	Q00277	LoVerde <i>et al.</i> , Mem. Inst. Oswaldo Cruz, 2004, 99, 37-43.
Eimeria maxima	82 kDa gametocyte antigen	yes	Q86LH7	Belli <i>et al.</i> , Vaccine 2004, 22, 4316-4325.
Eimeria maxima	56 kDa gametocyte antigen	yes	Q8I1K3	Belli <i>et al.</i> , Vaccine 2004, 22, 4316-4325.
Eimeria maxima	TFP250	yes	Q7YZP0	Witcombe <i>et al.</i> , Int. J. Parasitol. 2004, 34, 861-72.
Theileria parva	P67 surface antigen	yes	O96986	Kaba <i>et al.</i> , Vet. Parasitol. 2004, 121, 53-64.
Leishmania amazonensis	Antigenic WD protein	yes	Q6SJP6	Campbell <i>et al.</i> , Infect. Immun. 2004, 72, 2194-202.
Toxoplasma gondii	MIC3 microneme protein	yes	Q9GRG4	Ismael <i>et al.</i> , Infect. Immun. 2003, 71, 6222-8.
Ascaris suum	As16	yes	Q86M44	Tsuji <i>et al.</i> , Infect. Immun. 2003, 71, 5314-23.
Leishmania donovani infantum	A2	yes	O18714	Coelho <i>et al.</i> , Infect. Immun. 2003, 71, 3988-94.
Schistosoma mansoni	Calpain	yes	P27730	Siddiqui <i>et al.</i> , Infect. Immun. 2003, 71, 3844-51.
Leishmania infantum	Guanine nucleotide-binding protein subunit beta-like protein	yes	P62884	Ramiro <i>et al.</i> , Vaccine 2003, 21, 2474-84.
Neospora caninum	Surface antigen SAG1	yes	Q9UB12	Cannas <i>et al.</i> , Parasitology 2003, 126, 303-12.
Neospora caninum	SRS2 surface antigen	yes	Q9TVP5	Cannas <i>et al.</i> , Parasitology 2003, 126, 303-12.
Leishmania mexicana	Leishmanolysin C1	yes	P43150	Dumonteil <i>et al.</i> , Vaccine 2003, 21, 2161-8.
Leishmania mexicana	Cysteine proteinase B	yes	P36400	Dumonteil <i>et al.</i> , Vaccine 2003, 21, 2161-8.
Leishmania mexicana	P36 LACK protein	yes	Q7KFG4	Dumonteil <i>et al.</i> , Vaccine 2003, 21, 2161-8.
Leishmania amazonensis	Surface membrane glycoprotein GP46/M-2	yes	P21978	Dumonteil <i>et al.</i> , Vaccine 2003, 21, 2161-8.
Schistosoma mansoni	14 kDa fatty acid-binding protein	yes	P29498	Ramos <i>et al.</i> , J. Biol. Chem. 2003, 278, 12745-51.

Plasmodium knowlesi	Merozoite surface protein 1	yes	Q217E9	Garman <i>et al.</i> , J. Biol. Chem. 2003, 278, 7264-9.
Ichthyophthirius multi-filiis	Immobilization antigen	yes	Q9XZG2	Wang <i>et al.</i> , Fish Shellfish Immunol. 2002, 13, 337-50.
Plasmodium yoelii yoelii	Merozoite surface protein 1	yes	P13828	Kawabata <i>et al.</i> , Infect. Immun. 2002, 70, 6075-82.
Trypanosoma cruzi	Cruzipain	yes	Q26883	Schnapp <i>et al.</i> , Infect. Immun. 2002, 70, 5065-74.
Plasmodium falciparum	Antigen 332	yes	Q7JPX5	Ahlborg <i>et al.</i> , Clin. Exp. Immunol. 2002, 129, 318-25.
Schistosoma japonicum	Tropomyosin	yes	Q26519	Cao <i>et al.</i> , Zhongguo Ji Sheng Chong Xue Yu Ji Sheng Chong Bing Za Zhi, 1998, 16, 401-5.
Onchocerca volvulus	Fructose 1,6 bisphosphate aldolase	yes	Q9U9R9	McCarthy <i>et al.</i> , Infect. Immun. 2002, 70, 851-8.
Plasmodium vivax	Circumsporozoite protein	yes	P08677	Herrera <i>et al.</i> , Mol. Immunol. 2001, 38, 443-55.
Plasmodium vivax	Duffy binding protein	yes	Q4VDQ1	Herrera <i>et al.</i> , Mol. Immunol. 2001, 38, 443-55.
Plasmodium vivax	Ookinete surface protein Pvs25	yes	O96555	Herrera <i>et al.</i> , Mol. Immunol. 2001, 38, 443-55.
Plasmodium vivax	Ookinete surface protein Pvs28	yes	Q9NL18	Herrera <i>et al.</i> , Mol. Immunol. 2001, 38, 443-55.
Eimeria tenella	Sporozoite antigen	yes	P15744	Jenkins <i>et al.</i> , Vet. Parasitol. 2001, 101, 291-310.
Giardia lamblia (Giardia intestinalis)	Variable surface protein	yes	Q8MPM6	Jenkins <i>et al.</i> , Vet. Parasitol. 2001, 101, 291-310.
Cryptosporidium parvum	CP15/60	yes	Q08377	Jenkins <i>et al.</i> , Vet. Parasitol. 2001, 101, 291-310.
Cryptosporidium parvum	Immunodominant antigen Cp23	yes	Q8I0N2	Jenkins <i>et al.</i> , Vet. Parasitol. 2001, 101, 291-310.
Toxoplasma gondii	P30	yes	Q27298	Jenkins <i>et al.</i> , Vet. Parasitol. 2001, 101, 291-310.
Toxoplasma gondii	Surface antigen P22	yes	Q95NF7	Jenkins <i>et al.</i> , Vet. Parasitol. 2001, 101, 291-310.
Toxoplasma gondii	Dense granule protein 2	yes	P13404	Jenkins <i>et al.</i> , Vet. Parasitol. 2001, 101, 291-310.
Toxoplasma gondii	Dense granule protein 5	yes	Q07828	Jenkins <i>et al.</i> , Vet. Parasitol. 2001, 101, 291-310.
Toxoplasma gondii	Dense granule protein 1	yes	P13403	Jenkins <i>et al.</i> , Vet. Parasitol. 2001, 101, 291-310.
Toxoplasma gondii	Dense granule protein 4	yes	Q27002	Jenkins <i>et al.</i> , Vet. Parasitol. 2001, 101, 291-310.
Toxoplasma gondii	Dense granule protein 7	yes	O00933	Jenkins <i>et al.</i> , Vet. Parasitol. 2001, 101, 291-310.
Toxoplasma gondii	Rhoptry protein 4	yes	Q5Y808	Jenkins <i>et al.</i> , Vet. Parasitol. 2001, 101, 291-310.
Neospora caninum	Dense granule protein 1	yes	P90661	Jenkins <i>et al.</i> , Vet. Parasitol. 2001, 101, 291-310.
Neospora caninum	Dense granule protein 2	yes	Q25540	Jenkins <i>et al.</i> , Vet. Parasitol. 2001, 101, 291-310.
Trypanosoma cruzi	Trypomastigote surface glycoprotein	yes	Q26971	Jenkins <i>et al.</i> , Vet. Parasitol. 2001, 101, 291-310.
Trypanosoma cruzi	Paraflagellar rod component	yes	O00930	Jenkins <i>et al.</i> , Vet. Parasitol. 2001, 101, 291-310.
Babesia bovis	Merozoite surface protein (Bv60)	yes	Q17115	Jenkins <i>et al.</i> , Vet. Parasitol. 2001, 101, 291-310.
Babesia bovis	BV80 merozoite protein	yes	Q5XXE0	Jenkins <i>et al.</i> , Vet. Parasitol. 2001, 101, 291-310.
Babesia bovis	225 kDa antigen	yes	Q00708	Jenkins <i>et al.</i> , Vet. Parasitol. 2001, 101, 291-310.
Theileria annulata	Sporozoite surface antigen	yes	Q26675	Jenkins <i>et al.</i> , Vet. Parasitol. 2001, 101, 291-310.
Theileria annulata	Merozoite-piropasm surface antigen Tams1	yes	Q9N620	Jenkins <i>et al.</i> , Vet. Parasitol. 2001, 101, 291-310.
Schistosoma japonicum	Glutathione S-transferase 28 kDa	yes	P26624	Shi <i>et al.</i> , Vaccine 2001, 20, 462-7.
Schistosoma japonicum	23 kDa integral membrane protein	yes	P27591	Shi <i>et al.</i> , Vaccine 2001, 20, 462-7.
Leishmania donovani	P36 LACK protein	yes	Q76LS6	Melby <i>et al.</i> , Infect. Immun. 2001, 69, 4719-25.
Haemonchus contortus	Apical gut membrane polypeptide	yes	Q25021	Smith <i>et al.</i> , Vet. Parasitol. 2001, 98, 285-97.
Plasmodium falciparum	Merozoite surface protein 8	yes	Q8I476	Black <i>et al.</i> , Mol. Biochem. Parasitol. 2001, 114, 217-26.
Dictyocaulus viviparus	Acetylcholinesterase	yes	Q9GPL0	Matthews <i>et al.</i> , Int. J. Parasitol. 2001, 31, 307-17.
Plasmodium berghei	Circumsporozoite protein	yes	P06915	Weiss <i>et al.</i> , Infect. Immun. 2000, 68, 5914-9.
Schistosoma mansoni	Triosephosphate isomerase	yes	P48501	Yang <i>et al.</i> , Vaccine 2000, 19, 103-13.
Schistosoma mansoni	Paramyosin	yes	P06198	Yang <i>et al.</i> , Vaccine 2000, 19, 103-13.
Schistosoma mansoni	23 kDa integral membrane protein	yes	P19331	Yang <i>et al.</i> , Vaccine 2000, 19, 103-13.
Schistosoma mansoni	Calpain	yes	P27730	Yang <i>et al.</i> , Vaccine 2000, 19, 103-13.

Ascaris suum	Cytochrome c oxidase subunit 3	no	P24879
Babesia bigemina	Apocytochrome b	no	Q9XYH3
Babesia bigemina	Hypothetical protein	no	Q9GSQ6
Babesia bovis	Aldo-keto reductase	no	P40690
Babesia bovis	Gene BABR protein 1	no	P02890
Babesia bovis	High mobility group protein homolog NHP1	no	P40632
Babesia bovis	Phosphomannomutase	no	O43976
Babesia bovis	60S ribosomal protein L35	no	P52817
Babesia bovis	60S acidic ribosomal protein P2	no	P27055
Babesia bovis	Superoxide dismutase [Fe]	no	O15905
Babesia bovis	Tubulin beta chain	no	Q04709
Babesia bovis	ATP-binding protein	no	O15895
Babesia bovis	Iron-dependent superoxide dismutase	no	O15904
Babesia bovis	DnaJ homolog	no	O43978
Babesia divergens	Nascent polypeptide-associated complex subunit alpha	no	Q45FF9
Babesia gibsoni	Ribosomal phosphoprotein P0	no	A2A147
Brucella abortus	Aquaporin Z	no	P0C112
Brugia malayi	Actin	no	P90689
Clonorchis sinensis	Phosphoglycerate kinase	no	P50311
Cryptosporidium parvum	Eukaryotic initiation factor 4A	no	O02494
Cryptosporidium parvum	Pyruvate dehydrogenase [NADP+]	no	Q968X7
Dictyocaulus viviparus	Paramyosin	no	A3RLD3
Echinococcus granulosus	I4-3-3 protein homolog 1	no	Q9U408
Eimeria maxima	Cytochrome c oxidase subunit I [Fragment]	no	A1Z2U7
Eimeria maxima	Lactate dehydrogenase	no	Q8I8U3
Eimeria maxima	CGMP-dependent protein kinase	no	Q8MMZ5
Eimeria tenella	Enolase	no	Q967Y8
Entamoeba histolytica	Calcium-binding protein	no	P38505
Giardia lamblia (Giardia intestinalis)	Protein C4	no	Q01832
Haemonchus contortus	Aminopeptidase N	no	Q10737
Haemonchus contortus	6-phosphofructokinase	no	Q27665
Haemonchus contortus	Extracellular superoxide dismutase [Cu-Zn] [Precursor]	no	P51547
Ichthyophthirius multifiliis	Cathepsin L cysteine protease ICP2 [Fragment]	no	Q0MVE1
Leishmania amazonensis	Bifunctional dihydrofolate reductase-thymidylate synthase	no	P16126
Leishmania amazonensis	Probable quinone oxidoreductase	no	P42865
Leishmania donovani	Receptor-type adenylate cyclase A	no	Q27675
Leishmania donovani	Membrane transporter D1	no	Q01440
Leishmania donovani	Ornithine decarboxylase	no	P27116
Leishmania donovani	Hypoxanthine-guanine phosphoribosyltransferase	no	P43152
Leishmania donovani infantum	Topoisomerase I-like protein	no	Q9Y180
Leishmania infantum	Nucleoside hydrolase-like protein	no	A0AAK3
Leishmania infantum	Prostaglandin f2-alpha synthase [Fragment]	no	A1Y2D3
Leishmania infantum	Isocitrate dehydrogenase	no	A2CIA0

Leishmania major	Squalene synthase	no	Q25308
Leishmania major	Beta-tubulin	no	Q25315
Leishmania major	Pseudouridylate synthase-like protein	no	Q25346
Leishmania major	Telomerase reverse transcriptase [Fragment]	no	Q2NNR7
Leishmania major	Selenoprotein 1	no	Q2VC80
Leishmania major	Diacylglycerol kinase-like protein	no	Q4FVT6
Leishmania major	Actin	no	P45520
Leishmania major	Chaperonin HSP60, mitochondrial [Precursor]	no	Q94596
Leishmania major	rRNA 2'-O-methyltransferase fibrillarin	no	P35549
Leishmania major	Coproporphyrinogen III oxidase	no	P84155
Leishmania major	Phosphoglycerate kinase, cytosolic	no	Q27683
Leishmania mexicana	Triosephosphate isomerase	no	P48499
Leishmania mexicana	Carbamyl phosphate synthase	no	O15829
Leishmania mexicana	Glucose transporter	no	O76486
Neospora caninum	NTPase	no	O76144
Neospora caninum	Cdc2-related kinase 3	no	O15851
Neospora caninum	Biopterin transporter	no	O76729
Neospora caninum	Dolichol phosphate mannose synthase	no	O96795
Onchocerca volvulus	Catalase	no	Q27710
Plasmodium berghei	Cytochrome c oxidase subunit 1	no	O99252
Plasmodium falciparum	Calmodulin	no	P62203
Plasmodium falciparum	Calcium-transporting ATPase	no	Q08853
Plasmodium falciparum	Enolase	no	Q8IJN7
Plasmodium falciparum	Glutathione S-transferase	no	Q8MU52
Plasmodium knowlesi	Adenylosuccinate lyase [Fragment]	no	Q8WSJ8
Plasmodium vivax	Dihydrofolate reductase [Fragment]	no	Q00NY2
Plasmodium vivax	Cytochrome b	no	Q4G4Y5
Plasmodium vivax	L-lactate dehydrogenase	no	Q4PRK9
Plasmodium vivax	Multidrug resistance protein [Fragment]	no	Q6IWB3
Plasmodium vivax	Vivapain-3	no	Q6J0Z9
Plasmodium vivax	Lactate dehydrogenase [Fragment]	no	Q6JH30
Plasmodium yoelii yoelii	Cell division control protein 2 homolog	no	Q7RM49
Schistosoma japonicum	Cysteine dioxygenase	no	Q9U8F1
Schistosoma japonicum	Enolase	no	P33676
Schistosoma japonicum	Fatty acid-binding protein	no	O45035
Schistosoma japonicum	Adenylosuccinate lyase	no	A1XA55
Schistosoma japonicum	Calreticulin	no	O45034
Schistosoma mansoni	Dermaseptin-like peptide	no	P83914
Schistosoma mansoni	Hexokinase	no	Q26609
Schistosoma mansoni	Adenylate kinase	no	P25824
Schistosoma mansoni	Malate dehydrogenase, mitochondrial [Fragment]	no	P37227
Schistosoma mansoni	Phosphoglycerate kinase	no	P41759
Schistosoma mansoni	ATP:guanidino kinase SMC74	no	P16641
Schistosoma mansoni	Homeobox protein engrailed-like SMOX-2	no	Q26601
Schistosoma mansoni	Dystrobrevin	no	A2CI92

Schistosoma mansoni	Amidase	no	O02034
Schistosoma mansoni	Kallikrein-like serine protease SmSP1 [Fragment]	no	O16007
Schistosoma mansoni	Tryptophan hydroxylase	no	O96370
Taenia saginata	Oncosphere antigen TSA9	no	Q868Z4
Taenia saginata	Tovis13 protein	no	Q8T8D6
Taenia solium	Neuronal nitric oxide synthase protein inhibitor	no	Q1HFN2
Taenia solium	2-Cys peroxiredoxin	no	Q2TP88
Theileria annulata	Ubiquitin-conjugating enzyme E2, putative	no	Q4U8F2
Theileria annulata	Cytochrome c	no	Q4UEA0
Theileria parva	Casein kinase II subunit alpha	no	P28547
Toxoplasma gondii	Adenosine kinase	no	Q9TVW2
Toxoplasma gondii	Chorismate synthase	no	O02607
Toxoplasma gondii	Peroxisomal catalase	no	Q9XZD5
Toxoplasma gondii	Cytochrome b	no	O20672
Toxoplasma gondii	Enolase 1	no	Q9UAE6
Toxoplasma gondii	Enolase 2	no	Q9BPL7
Toxoplasma gondii	Hypoxanthine-guanine-xanthine phosphoribosyltransferase	no	Q26997
Toxoplasma gondii	Hexokinase	no	Q969A8
Toxoplasma gondii	Casein kinase I	no	Q6QNM1
Toxoplasma gondii	L-lactate dehydrogenase	no	Q27797
Toxoplasma gondii	Myosin-A	no	O00934
Toxoplasma gondii	Myosin-B/C	no	O00936
Toxoplasma gondii	Myosin-D	no	Q9XYF6
Toxoplasma gondii	Rhomboid-like protease 1	no	Q695U0
Toxoplasma gondii	Rhomboid-like protease 2	no	Q695T9
Trypanosoma cruzi	Tyrosine aminotransferase	no	P33447
Trypanosoma cruzi	Calmodulin	no	P18061
Trypanosoma cruzi	Chagasin	no	Q966X9
Trypanosoma cruzi	Arginine kinase	no	O96507

Supplementary Material 2

Fungal Antigens				
species	protein	protection	swiss-prot	Reference
Aspergillus fumigatus	Major allergen Asp f 1	yes	P67875	Ito <i>et al.</i> , Infect. Immun. 2006, 74, 5075-84.
Aspergillus fumigatus	Allergen Asp f 3	yes	O43099	Ito <i>et al.</i> , Infect. Immun. 2006, 74, 5075-84.
Candida albicans	Mannoprotein MP65	yes	Q9HEP1	Pietrella <i>et al.</i> , Cell Microbiol. 2006, 8, 602-12.
Coccidioides posadasii	Peroxisomal matrix protein	yes	Q30A78	Orsborn <i>et al.</i> , Infect. Immun. 2006, 74, 1865-72.
Coccidioides posadasii	Aspartyl protease 1	yes	Q3S565	Tarcha <i>et al.</i> , Infect. Immun. 2006, 74, 516-27.
Candida albicans	Glucan 1,3-beta-glucosidase	yes	P43070	Pitarch <i>et al.</i> , Mol. Cell Proteomics 2006, 5, 79-96.
Candida albicans	Enolase 1	yes	P30575	Pitarch <i>et al.</i> , Mol. Cell Proteomics 2006, 5, 79-96.
Aspergillus fumigatus	Enolase	yes	Q96X30	Denikus <i>et al.</i> , Infect. Immun. 2005, 73, 4704-13.
Aspergillus fumigatus	Heat shock protein 90	yes	P40292	Denikus <i>et al.</i> , Infect. Immun. 2005, 73, 4704-13.
Candida albicans	Heat shock protein 91	yes	P46598	Raska <i>et al.</i> , Folia Microbiol. (Praha) 2005, 50, 77-82.
Coccidioides immitis	Antigen 2	yes	Q12295	Silva <i>et al.</i> , FEMS Immunol. Med. Microbiol.

				2005, 43, 393-8.
Coccidioides immitis	Expression library immunization antigen 1	yes	Q6Y2E2	Cox <i>et al.</i> , Clin. Microbiol. Rev. 2004, 17, 804-39.
Coccidioides immitis	1,3-b-glucanosyltransferase	yes	Q1EB82	Cox <i>et al.</i> , Clin. Microbiol. Rev. 2004, 17, 804-39.
Coccidioides posadasii	CS antigen	yes	Q8J1X8	Cox <i>et al.</i> , Clin. Microbiol. Rev. 2004, 17, 804-39.
Candida albicans	Pyruvate kinase	yes	P46614	Fernandez-Arenas <i>et al.</i> , Proteomics 2004, 4, 3007-20.
Candida albicans	Pyruvate decarboxylase	yes	P83779	Fernandez-Arenas <i>et al.</i> , Proteomics 2004, 4, 3007-20.
Candida albicans	Triosephosphate isomerase	yes	Q9P940	Fernandez-Arenas <i>et al.</i> , Proteomics 2004, 4, 3007-20.
Candida albicans	Potential DL-glycerol-3-phosphatase	yes	Q5A7M9	Fernandez-Arenas <i>et al.</i> , Proteomics 2004, 4, 3007-20.
Candida albicans	Fructose-bisphosphate aldolase	yes	Q9URB4	Fernandez-Arenas <i>et al.</i> , Proteomics 2004, 4, 3007-20.
Candida albicans	Probable inosine-5'-monophosphate dehydrogenase	yes	O00086	Fernandez-Arenas <i>et al.</i> , Proteomics 2004, 4, 3007-20.
Candida albicans	Acetyl-coenzyme A synthetase 2	yes	Q8NJN3	Fernandez-Arenas <i>et al.</i> , Proteomics 2004, 4, 3007-20.
Cryptococcus neoformans	Mannoprotein	yes	Q2Q4L5	Mansour <i>et al.</i> , Infect. Immun. 2004, 72, 1746-54.
Microsporium canis	Metalloprotease, MEP3	yes	Q8J0D6	Vermout <i>et al.</i> , FEMS Immunol. Med. Microbiol. 2004, 40, 75-80.
Paracoccidioides brasiliensis	Immunodominant antigen Gp43	yes	Q9HDF2	Taborda <i>et al.</i> , Scand. J. Immunol. 2004, 59, 58-65.
Ajellomyces capsulata	Histone H2B	yes	Q7Z9J4	Nosanchuk <i>et al.</i> , J. Clin. Invest. 2003, 112, 1164-75.
Cryptococcus neoformans	Chitin deacetylase-like mannoprotein MP98	yes	Q5KIC2	Huang <i>et al.</i> , Infect. Immun. 2002, 70, 5485-93.
Cryptococcus neoformans	88 kDa immunoreactive mannoprotein MP88	yes	Q7LM46	Huang <i>et al.</i> , Infect. Immun. 2002, 70, 5485-93.
Coccidioides immitis	Urease	yes	Q400Z7	Li <i>et al.</i> , Infect. Immun. 2001, 69, 2878-87.
Coccidioides immitis	Heat-shock protein 60	yes	O94110	Li <i>et al.</i> , Infect. Immun. 2001, 69, 2878-87.
Candida albicans	Aspartyl proteinase	yes	Q00311	Antonio, Nippon Ishinkin Gakkai Zasshi 2000, 41, 219.
Aspergillus fumigatus	Major allergen Asp f 2	yes	P79017	Cenci <i>et al.</i> , J. Immunol. 2000, 165, 381-8.
Pneumocystis carinii	P55 antigen variant 3	yes	Q3L0W9	Smulian <i>et al.</i> , Microbes Infect. 2000, 2, 127-36.
Pneumocystis carinii	Major surface glycoprotein A	yes	Q01824	Smulian <i>et al.</i> , Microbes Infect. 2000, 2, 127-36.
Ajellomyces capsulata	Acyl-CoA desaturase	no	Q12618	
Aspergillus fumigatus	NmrA-like family protein	no	Q4W8X7	
Aspergillus fumigatus	Autophagy-related protein 22-1	no	Q4WH97	
Aspergillus fumigatus	Acetamidase regulatory protein	no	Q4WK35	
Aspergillus fumigatus	Adenosine deaminase	no	Q4X1Q4	
Aspergillus fumigatus	Isocitrate lyase	no	Q6T267	
Candida albicans	Glycoamidase	no	A5GXM4	
Candida albicans	Multidrug resistance regulator 1	no	A9QMB8	
Candida albicans	6-phosphogluconate dehydrogenase	no	O13287	
Candida albicans	Peroxisomal catalase	no	O13289	
Candida albicans	Protein phosphatase Ssd1 homolog	no	O13327	
Candida albicans	40S ribosomal protein S9, mitochondrial	no	O94150	
Candida albicans	Folypolyglutamate synthetase	no	Q59TB5	
Candida albicans	Pyrroline-5-carboxylate reductase	no	Q59US1	
Candida albicans	Ribosome assembly protein 3	no	Q59VF9	
Candida albicans	Methionine aminopeptidase	no	Q5A0X2	

Candida albicans	Diphthamide biosynthesis protein 4	no	Q5AD49	
Candida albicans	Ferric reductase-like protein	no	Q5AHC9	
Coccidioides immitis	Alpha box protein	no	A4URR8	
Coccidioides immitis	U3 small nucleolar RNA-associated protein 10	no	Q1DHH9	
Coccidioides immitis	ATP-dependent RNA helicase SUB2	no	Q1DI07	
Coccidioides immitis	Topoisomerase 1-associated factor 1	no	Q1DM35	
Coccidioides immitis	Autophagy protein 5	no	Q1DP17	
Coccidioides posadasii	Chitinase 2	no	A7XUU4	
Coccidioides posadasii	Orotate phosphoribosyltransferase	no	O93849	
Coccidioides posadasii	Arginase	no	P40906	
Cryptococcus neoformans	Beta-1,2 xylosyltransferase 1	no	A5JSV9	
Cryptococcus neoformans	Ubiquitin	no	P61863	
Cryptococcus neoformans	Palmitoyltransferase AKR1	no	Q5KP49	
Microsporum canis	Beta-tubulin	no	Q1W1F7	
Paracoccidioides brasiliensis	Fructose-bisphosphate aldolase	no	Q8J0N6	
Pneumocystis carinii	Dihydrofolate reductase	no	P16184	
Pneumocystis carinii	Calmodulin	no	P41041	