Table S1 Plasmids used in this study.

Plasmid	Description	Source or reference
Cloning vectors:		
pJET1.2/blunt	PCR products cloning vector, Amp^R	Fermentas
p2NIL	Recombination vector, nonreplicating in mycobacteria, Kan^R	(54)
pGOAL17	Source of PacI marker cassette (*sucB*, *lacZ*), Amp^R	(54)
pJam2	Shuttle vector carrying inducible P_{ami} promoter, Kan^R	(75)
pMV306Km	Mycobacterial integrating vector, Kan^R	Med-Immune Inc.
pMV306Hyg	Mycobacterial integrating vector, Hyg^R	Med-Immune Inc.
pMV306Gm	pMV306Km vector with a defective Kan^R gene (the Gm^R gene cloned into the SmaI site of the Kan^R gene), Gm^R	This study
pHIS.Parallel1	Protein expression vector, Amp^R	(69)
Vectors used for gene replacement:		
pJPD6Ms	p2NIL-based recombination vector carrying the 5' end of *M. smegmatis accD6* and its upstream flanking sequence (1762 bp) cloned next to the 3' end of *accD6* and its downstream flanking sequence (1237 bp), enriched with the PacI cassette from pGOAL17, Kan^R	This study
pJPD6Tb	p2NIL-based recombination vector carrying the *M. tuberculosis accD6* 5' end and its upstream flanking sequence (1595 bp) cloned next to the *accD6* 3' end and its downstream flanking sequence (1197 bp), enriched with the PacI cassette from pGOAL17, Kan^R	This study
Vectors used for complementation in *M. tuberculosis*:		
pFASTb	PCR fragment harboring the promoter of the *M. tuberculosis* FAS-II operon and the first 114 bp of the *fabD* gene cloned into the NotI/XbaI site of the pMV306Gm integrative vector	This study
pFASTb1	PCR fragment carrying 795 bp of the 3' end of *fabD*, all of *acpM* and *kasA,* and the first 259 bp of *kasB*, cloned into the XbaI/EcoRI site of the pFASTb vector	This study
pFASTb2	PCR fragment carrying 1058 bp of the *kasB* 3' end and the full-length *accD6* gene cloned into the EcoRI site of pFASTb1 to generate a vector harboring a reconstitution of the whole and continuous *M. tuberculosis* FAS-II gene cluster ($P_{fasII}FASII_{Mtb}$) (Fig. 2A)	This study
pFD6Tb	PCR fragment carrying the full-length sequence of *M. tuberculosis accD6* (Rv2247) (1486 bp) cloned into the XbaI/HindIII site of the pMV306Hyg integrative vector	This study
pFD6Tb1	pFD6Tb with PCR fragment carrying the FAS-II promoter (1028 bp), cloned into the NotI/XbaI site upstream of the *accD6* gene sequence ($P_{fasII}accD6_{Mtb}$) (Fig. 2A)	This study
pPD6Tb	PCR fragment (2542 bp) carrying all of *accD6* (Rv2247) together with 1088 bp of upstream sequence (the 30 bp intergenic region and a 1058 bp fragment of *kasB*), cloned into the EcoRI site of the pMV306Gm integrative vector ($P_{acc}accD6_{Mtb}$) (Fig. 5B)	This study
Vectors used for complementation in *M. smegmatis*:		
pAceD6Ms	$accD6_{Msm}$ under the control of the P_{ami} promoter in pJam2 vector, Kan^R ($P_{ami}accD6_{Msm}$)	This study
pAceD6Tb	$accD6_{Mtb}$ under the control of the P_{ami} promoter in pJam2 vector, Kan^R ($P_{ami}accD6_{Mtb}$)	This study
pPD6Ms	PCR fragment (1637 bp) carrying all of *M. smegmatis accD6* (*MSMEG_4329*) and 180 bp of sequence upstream from the *accD6* start codon, cloned into the ClaI/EcoRI site of the pMV306Km vector	This study
pPD6Ms1	pPD6Ms with a PCR fragment (827 bp) upstream from the above-described 180 bp sequence, cloned into the ClaI site to generate pPD6Ms1 ($P_{acc}accD6_{Msm}$) (Fig. 5A)	This study
Vector used for overexpression of $AccD6_{Mtb}$ protein:		
pHD6Tb	pHIS.Parallel1 expression vector with $accD6_{Mtb}$ cloned into the BamHI/HindIII site	This study