**Supplementary table 1: Putative esterases/lipases in *M. tuberculosis*.**

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| **Esterase** | **Putative functional role** | **Required during stress and/or persistence** | **Subcellular localization** | **References** |
| TAG | * Triester of fatty acids combined with glycerol
* Carbon and energy source during persistence
* Preferentially cleaved by lipases, sometimes by esterases
* Reduces toxicity from free fatty acids
 | Yes | Cell wall and cytoplasm | Sirakova *et al.*, 2012 |
| Culp1 | * Cell wall remodelling, alters lipid composition
* Hydrolyses short-medium chain fatty acids
* Protective immunity; putative vaccine antigen
 | Yes | Extracellularly secreted and cell wall | West *et al.*, 2009 |
| Culp4 | * Protective immunity; putative vaccine antigen
* Hydrolyses TDM
 | Yes, nutrient depletion | Cell wall | Yang *et al.*, 2014 |
| Culp3 | * Hydrolyses TDM
* Remodels cell envelope to increase nutrient flux
 | Yes, nutrient depletion | Cell wall | Yang *et al.*, 2014 |
| Culp6 | * Hydrolyses host fatty acids
 | Yes, hypoxia | Cell wall and membrane | Rastogi *et al.*, 2016; Tallman *et al.*, 2016 |
| Rv1288 | * Mycolyltransferase activity for synthesis of TDM
* Cell wall remodelling, alters lipid composition
 | Yes, nutrient depletion | Cell wall | Maan *et al.*, 2018 |
| PE11, PE16 | * Member of the Lip and PE/PPE family proteins; modulates the host immune response
* Hydrolyses short-medium chain fatty acids
* Cell wall remodelling, alters lipid composition
 | Yes, acidic pH, hypoxia and nutrient depletion | Cell wall | Singh *et al.*, 2016; Sultana *et al.*, 2013 |
| Rv3036c | * Preferentially hydrolyses short chain esters
* Cell wall remodelling, alters lipid composition
 | Yes | Cell wall and membrane | Chen *et al.*, 2014; Tallman *et al.*, 2016 |
| Rv0774c | * Hydrolyses short-chain esters
* Modulates the host immune response
 | Yes, iron depletion | Extracellularly secreted | Kumar *et al.*, 2017b |
| Rv0183 | * Putative role in degrading host cell lipids
* Involved during reactivation from hypoxia
 | Yes | Cell wall | Tallman *et al.*, 2016 |
| Rv1683 | * Long-chain acyl CoA synthase
* Involved during reactivation from hypoxia
 | Yes | Cell membrane | Tallman *et al.*, 2016 |
| Rv3591c | * Unknown
 | Yes, hypoxia | Cell membrane | Ortega *et al.*, 2016; Tallman *et al.*, 2016 |
| Rv0421c | * Unknown
 | Yes, hypoxia | Cytosol | Ortega *et al.*, 2016; Tallman *et al.*, 2016 |
| Rv0774c | * Cell wall remodelling, alters lipid composition
* Modulates the host immune response
 | Yes | Cell wall | Ortega *et al.*, 2016; Tallman *et al.*, 2016 |
| **Esterase** | **Putative functional role** | **Required during stress and/or persistence** | **Subcellular localization** | **References** |
| Hip1 Rv2224c | * Regulates cleavage and extracellular release of the stress-induced protein GroEL2
* Hydrolyzes medium chain-length ester bonds
* Cell wall remodelling, alters lipid composition
 | Yes, nutrient depletion | Cell envelope | Rengarajan *et al.*, 2008) (Lun and Bishai, 2007 |
| LipC | * Highly immunogenic, stimulates humoral immune and cytokine response
* Hydrolyses short-medium chain fatty acids
 | Yes, nutrient depletion | Cell wall and envelope | Deb *et al.*, 2006; Shen *et al.*, 2012 |
| LipD | * Hydrolyses long chain fatty acids
 | Yes, oxidative stress and acidic pH | Cell wall and envelope | Gurdyal Singh *et al.*, 2014 |
| LipE | * Hydrolyses medium-chain esters
* Putative role in TAG metabolism
 | Yes, nutrient depletion | Cell membrane | Yang *et al.*, 2019 |
| LipF | * Hydrolyses short chain fatty acids
 | Yes, acidic pH | Cell wall | Camacho *et al.*, 1999; Zhang *et al.*, 2005 |
| LipH | * Hydrolyses short chain TAG and esters
 | Yes | Cell wall | Ravindran *et al.*, 2014; Tallman *et al.*, 2016 |
| LipI | * Hydrolyses short chain fatty acids
 | Yes, nutrient depletion and hypoxia | Cell wall | Lin *et al.*, 2017 |
| LipL | * Hydrolyses short-long chain fatty acids
* Induces host immune response
 | Yes, hypoxia | Cell wall and membrane | Cao *et al.*, 2015; Deb *et al.*, 2006 |
| LipN | * Hydrolyses short chain fatty acids
 | Yes, acidic pH, hypoxia | Cytosolic | Jadeja *et al.*, 2016 |
| LipU | * Hydrolyses short chain fatty acids
 | Yes, nutrient depletion | Extracellularly secreted | Kaur *et al.*, 2017; Li *et al.*, 2017 |
| LipV | * Hydrolyses short-medium chain fatty acids
 | Yes, acidic pH | Cell membrane | Singh *et al.*, 2014 |
| LipY | * Highly immunogenic, regulated by the PE/PPE protein family
* Hydrolyses ester bonds in stored TAG (short-long chain fatty acids)
* Putative role in resuscitation
 | Yes, nutrient depletion | Cell wall | Deb *et al.*, 2006; Mishra *et al.*, 2008; Singh *et al.*, 2011 |
| TAG: Triacylglycerol; TDM: Trehalose dimycolate; CULP: Cutinase-like proteins |