

1. Akhil Raj Pushparajan, Lekshmi K. Edison, Ramakrishnan Ajay Kumar (2022). *Mycobacterium tuberculosis* transcriptional regulator Rv1019 is upregulated in hypoxia, and negatively regulates *Rv3230c-Rv3229c* operon encoding enzymes in the oleic acid biosynthetic pathway. *FEBS J.* 2022 Oct. <https://doi.org/10.1111/febs.16647>.
2. Balaji Muralikrishnan, Lekshmi K Edison, Azger Dusthacker, G R Jijimole, Ranjit Ramachandran, Aravind Madhavan, Ramakrishnan Ajay Kumar (2022). Chrysomycin A inhibits the topoisomerase I of *Mycobacterium tuberculosis*. *J Antibiot (Tokyo)* 2022 Apr;75(4):226-235. doi: 0.1038/s41429-022-00503-z.
3. S Salini, Sinchana G Bhat, Saba Naz, Natesh Ramanathan, R Ajay Kumar, Vinay Nandicoori, and Krishna Kurthkoti (2022). The error-prone polymerase DnaE2 mediates the evolution of antibiotic resistance in persister mycobacterial cells. *Antimicrob Agents Chemother.* 2022 Mar 15;66(3):e01773-21.
4. Aravind Madhavan, K. B. Arun, Akhil Raj Pushparajan, M. Balaji, Ramakrishnan Ajay Kumar (2021). Transcription Repressor Protein ZBTB25 Associates with HDAC1-Sin3a Complex in *Mycobacterium tuberculosis*-Infected Macrophages, and Its Inhibition Clears Pathogen by Autophagy. *mSphere.* 2021 Feb 24;6(1) doi: 10.1128/mSphere.00036-21.
5. Akhil Raj Pushparajan, Ranjit Ramachandran, Jijimole Gopi Reji, Ramakrishnan Ajay Kumar (2020). *Mycobacterium tuberculosis* TetR family transcriptional regulator Rv1019 is a negative regulator of the *mfd-mazG* operon encoding DNA repair proteins. *FEBS Letters*; doi:10.1002/1873-3468.13861.
6. K. B. Arun, Aravind Madhavan, Billu Abraham, M. Balaji, K. C. Sivakumar, P. Nisha, R. Ajay Kumar (2020). Acetylation of isoniazid - a novel mechanism of isoniazid resistance in *Mycobacterium tuberculosis*. *Antimicrob Agents Chemother.* 2020 Dec 16;65(1):e00456-20.
7. Sajith Raghunandanan, Leny Jose, Vipin Gopinath and Ramakrishnan Ajay Kumar (2019). Comparative label-free lipidomic analysis of *Mycobacterium tuberculosis* during dormancy and reactivation. *Sci. Rep.* 2019 Mar 6;9(1):3660. DOI:10.1038/s41598-019-40051-5.
8. Sajith Raghunandanan, Leny Jose and Ramakrishnan Ajay Kumar (2018). Dormant *Mycobacterium tuberculosis* converts isoniazid to the active drug in a Wayne's model of dormancy. *J Antibiot.* 05 September 2018. Doi: 10.1038/s41429-018-0098-z.
9. Raghunandanan S, Ramachandran R, Gomez RL, Sivasankar D, Bommakanti A, Kondapi AK, Varadarajan R and Kumar RA (2018). Rv0474 is a copperresponsive transcriptional regulator that

negatively regulates expression of RNA polymerase  $\beta$  subunit in *Mycobacterium tuberculosis*. FEBS J. Aug. 18. doi: 10.1111.

10. Dan VM, Muralikrishnan B, Sanawar R, J S V, Burkul BB, Srinivas KP, Lekshmi A, Pradeep NS, Dastager SG, Santhakumari B, Santhoshkumar TR, Kumar RA, Pillai MR (2018). *Streptomyces* sp metabolite(s) promotes Bax mediated intrinsic apoptosis and autophagy involving inhibition of mTOR pathway in cervical cancer cell lines. Sci Rep. 2018 Feb 12;8(1):2810.
11. Suja K P, Leny Jose, Divya Lakshmanan, Anu G Vidya, Reshmi Nair RJ, and R Ajay Kumar (2017). Isolation and Characterization of Anti-mycobacterial Compounds from Fruits of *Aegle marmelos* (L.) Correa. J Commun Dis. 49(4): 32-38.
12. Balaji Muralikrishnan, Vipin Mohan Dan, J.S. Vinodh, Vellekkat Jamsheena, Ranjit Ramachandran, Sabu Thomas, Syed G. Dastager, K. Santhosh Kumar, Ravi Shankar Lankalapalli and R Ajay Kumar (2017). Anti-microbial activity of chrysoerythrin A produced by *Streptomyces* sp. against *Mycobacterium tuberculosis*. RSC Adv., 7, 36335-36339.
13. Gomez RL, Jose L, Ramachandran R, Raghunandan S, Muralikrishnan B, Johnson JB, Krishnankutty SC, Mundayoor S and Kumar RA (2016). The multiple stress responsive transcriptional regulator Rv3334 of *Mycobacterium tuberculosis* is an autorepressor and a positive regulator of *kstR*. FEBS J. 283(16):3056-71.
14. Dhanasooraj D, Kumar RA and Mundayoor S (2016). Subunit Protein Vaccine Delivery System for Tuberculosis Based on Hepatitis B Virus Core VLP (Hbc-VLP) Particles. Methods Mol Biol. 2016; 1404:377-92.
15. Jose L, Ramachandran R, Bhagavat R, Gomez RL, Chandran A, Raghunandan S, Omkumar RV, Chandra N, Mundayoor S and Kumar RA (2016). Hypothetical protein Rv3423.1 of *Mycobacterium tuberculosis* is a histone acetyltransferase. FEBS J. 283(2):265-81.
16. Chandran A, Antony C, Jose L, Mundayoor S, Natarajan K and Kumar RA (2015). *Mycobacterium tuberculosis* Infection Induces HDAC1-Mediated Suppression of *IL-12B* Gene Expression in Macrophages. Front. Cell. Infect. Microbiol. Dec 2;5:90. <http://dx.doi.org/10.3389/fcimb.2015.00090>.
17. Gopinath V, Raghunandan S, Gomez RL, Jose L, Surendran A, Ramachandran R, Pushparajan AR, Mundayoor S and Jaleel A, Kumar RA (2015). Profiling the Proteome of *Mycobacterium tuberculosis* during Dormancy and Reactivation. Mol Cell Proteomics. 14(8):2160-2176.
18. Augustine N, Goel AK, Sivakumar KC, Kumar RA and Thomas S (2014). Resveratrol – a potential inhibitor of biofilm formation in *Vibrio cholerae*. Phytomedicine. 2014 Feb 15;21(3):286-9.

19. Dhanasooraj D, Kumar RA and Mundayoor S (2013). Vaccine delivery system for tuberculosis based on nano-sized hepatitis B virus core protein particles. *Int J Nanomedicine*. 2013;8:835-43.
20. Joseph BV, Soman S, Hill V, Kumar RA, Rastogi N and Mundayoor S (2013). Efficient discrimination by MIRU-VNTRs of *Mycobacterium tuberculosis* clinical isolates belonging to the predominant SIT11/EAI3-IND ancestral genotypic lineage in Kerala, India. *Int J Mycobacteriol*. 2(4):244-7.
21. Joseph BV, Soman S, Radhakrishnan I, Hill V, Dhanasooraj D, Kumar RA, Rastogi N and Mundayoor S (2013). Molecular epidemiology of *Mycobacterium tuberculosis* isolates from Kerala, India using IS6110-RFLP, spoligotyping and MIRU-VNTRs. *Infect Genet Evol*. 16:157-64.
22. Madhavalatha GK, Joseph BV, Paul LK, Kumar RA, Hariharan R and Mundayoor S (2012). Whole-genome sequences of two clinical isolates of *Mycobacterium tuberculosis* from Kerala, South India. *J Bacteriol*. 194(16):4430. doi: 10.1128/JB.00453-12.
23. Joseph SV, Madhavalatha GK, Kumar RA and Mundayoor S (2012). Comparative analysis of mycobacterial truncated hemoglobin promoters and the groEL2 promoter in free-living and intracellular mycobacteria. *Appl Environ Microbiol*. 78(18):6499- 506.
24. Anilkumar AK, Madhavalatha GK, Paul LK, Radhakrishnan I, Kumar RA, Mundayoor S (2012). Standardization and evaluation of a tetraplex polymerase chain reaction to detect and differentiate *Mycobacterium tuberculosis* complex and nontuberculous Mycobacteria - a retrospective study on pulmonary TB patients. *Diagn Microbiol Infect Dis*. 2012 Mar;72(3):239-47
25. Yamuna E, Kumar RA, Zeller M and Rajendra Prasad KJ (2012). Synthesis, antimicrobial, antimycobacterial and structure-activity relationship of substituted pyrazolo-, isoxazolo-, pyrimido- and mercaptopyrimidocyclohepta[b]indoles. *Eur J Med Chem*. 47(1):228-38.
26. Lakshmanan D, Werngren J, Jose L, Suja KP, Nair MS, Varma RL, Mundayoor S, Hoffner S and Kumar RA (2011). Ethyl p-methoxycinnamate isolated from a traditional antituberculosis medicinal herb inhibits drug resistant strains of *Mycobacterium tuberculosis* in vitro. *Fitoterapia* 82: 757-761.
27. Joseph BV, Soman S, Radhakrishnan I, Madhavalatha GK, Paul LK, Mundayoor S and Kumar RA (2009). Drug resistance in *Mycobacterium tuberculosis* isolates from tuberculosis patients in Kerala, India. *Int J Tuberc Lung Dis*. 13(4):494-9.
28. James B, Viji S, Mathew S, Nair MS, Lakshmanan D and Kumar RA (2007). Synthesis of novel highly functionalized biologically active polycyclic caged amides. *Tetrahedron Letters* 48(35):6204-6208.

29. Kumar RA, Naidu SR, Wang X, Imbalzano AN and Androphy EJ (2007). Interaction of papillomavirus E2 protein with the Brm chromatin remodeling complex leads to enhanced transcriptional activation. *J Virol* 81(5):2213-20.
30. Soman S, Joseph BV, Sarojini S, Kumar RA, Katoch VM and Mundayoor S (2007). Presence of region of difference 1 among clinical isolates of *Mycobacterium tuberculosis* from India. *J Clin Microbiol.* 2007 Oct;45(10):3480-1.
31. Radhakrishnan I, K MY, Kumar RA and Mundayoor S (2001). Implications of low frequency of IS6110 in fingerprinting field isolates of *Mycobacterium tuberculosis* from Kerala, India. *J Clin Microbiol.* 39(4):1683.
32. Kumar RA, Indulakshmi R and Mundayoor S (2000). A single-step, eco-friendly method to extract DNA from *Mycobacterium tuberculosis* for polymerase chain reaction. *Anal Biochem.* 15; 286(2):310-2.
33. Kumar RA, Vaze MB, Chandra NR, Vijayan M and Muniyappa K (1996). Functional characterization of the precursor and spliced forms of RecA protein of *Mycobacterium tuberculosis*. *Biochemistry* 35(6):1793-802.
34. R Ajay Kumar, P. Gunasekaran and M. Lakshmanan (1999). Biodegradation of tannic acid by *Citrobacter freundii* isolated from a tannery effluent. *J. Basic Microbiology.* 1999; 39(3):161-8.
35. R. Ajay Kumar, Arul Jayaraman, Manickam Lakshmanan and Paramasamy Gunasekaran (1992). Bioconversion of Gallic acid into pyrogallol by immobilized *Citrobacter freundii* TB3. *J. Fermentation and Bioengineering.* 1992; 74(3). 159-162.