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### CERTIFICATE

This is to certify that the thesis entitled “**Genetic Variations in Host Innate and Adaptive Immune Response in Tuberculosis: A Search for Risk Loci in North Indians**” is a bonafide work of Mr. **Abhimanyu** conducted in Department of Microbiology, Vallabhbhai Patel Chest Institute, University of Delhi, Delhi, embodies faithful record of original research work carried out by his in fulfillment of the requirement for the award of the degree of Doctor of Philosophy.

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