



## Pathological Roles of LRRK2

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### Message from the Guest Editor

Leucine-rich repeat kinase 2 (LRRK2) is a multidomain Ser/Thr kinase that physiologically phosphorylates several substrate proteins, including Rab GTPases, which are molecular switches for intracellular vesicular transport. LRRK2 has been identified as a gene associated with familial and sporadic Parkinson disease (PD), and recent studies suggest that its overactivation is involved in the pathogenic process of PD. LRRK2 has also been found to be associated with several immunological disorders, namely, inflammatory bowel diseases, including Crohn disease and ulcerative colitis, Hansen disease (leprosy), and systemic lupus erythematosus; however, the pathological significance of substrate phosphorylation in the context of these diseases remains unclear. This Special Issue of Biomolecules focuses on recent advances relating to the pathological roles of LRRK2 in diseases.





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