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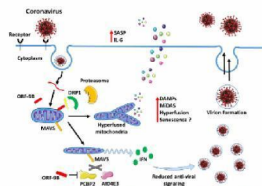


Figure 1. Modulation of mitochondrial dynamics upon CoV infection. ORF4b, a viral factor of severe acute respiratory syndrome coronavirus (SARS-CoV), localizes to mitochondria and causes mitochondrial elongation by triggering ubiquitination and proteasomal degradation of the mitochondrial protein (DRP1). Further, acting on mitochondrial ORF4b targets the mitochondrial associated adaptor protein (MAVS) structure to complex (PINK1) containing protein 2 (PINK2) and the E3 ubiquitin ligase (ARL1) to trigger the degradation of MAVS. This reduces host cell interferon response and antiviral signaling. However, these changes may later trigger cellular senescence and contribute to enhance the inflammatory response via the senescence associated secretory phenotype (SASP).