The Rev protein encoded by the HIV virus is required for nuclear export of viral mRNA encoding certain structural proteins of the virus. Rev normally shuttles back and forth from nucleus to cytoplasm to accomplish mRNA export. Under some conditions Rev is found primarily in the cytoplasm (figure 1A). In the presence of the broad-spectrum antibiotic leptomycin B, however, Rev is found exclusively in the nucleus (figure 1B). suggest some possible ways by which leptomycin B might alter the distribution of Rev.

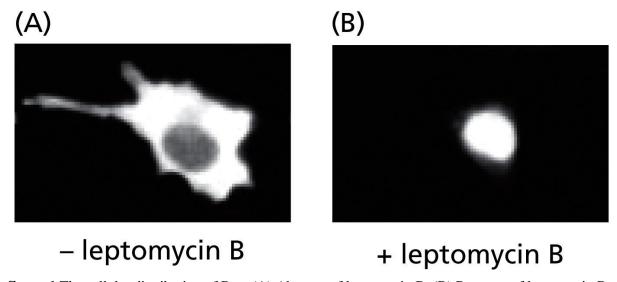


figure 1 The cellular distribution of Rev. (A) Absence of leptomycin B. (B) Presence of leptomycin B.