Secondary structure of the AnCOB intron. Exons are in lower case. Double-arrowed lines indicate likely tertiary interactions between the boxed regions: L2/P8 and L9/P5. Group I introns react by two sequential transesterification reactions: The 3'OH of an exogenous guanosine attacks the 5' splice site (5' SS) (arrow) and is transferred to the first base of the intron. The exposed 3'OH end of the upstream exon then attacks the 3' splice site (3' SS) (arrow), releasing the intron and leaving the exons ligated.