



**FIGURE 1.** The hammerhead ribozyme. (A) Secondary structure and essential sequences. The ribozyme shows intramolecular cleavage (*in cis*). The arrow indicates the cleavage site. N = any nucleotide; N' = any nucleotide complementary to N; H = any nucleotide except G; R = purine nucleotide; Y = pyrimidine nucleotide complementary to R. (B) Schematic representation of an *in trans* (intermolecular) cleaving ribozyme. The RNA substrate (*lower strand*) is labeled with two dyes to enable readout of cleavage activity via fluorescence measurement. F = fluorescent dye; Q = fluorescence quencher. If the substrate is intact, no fluorescence is observed due to proximity of the quencher (*left*). After cleavage has occurred, products dissociate from the ribozyme, and fluorescence can be detected (*right*).

*Protein-Protein Interactions: A Molecular Cloning Manual*, 2nd Ed., © 2005 by Cold Spring Harbor Laboratory Press, Chapter 28, Figure 1.