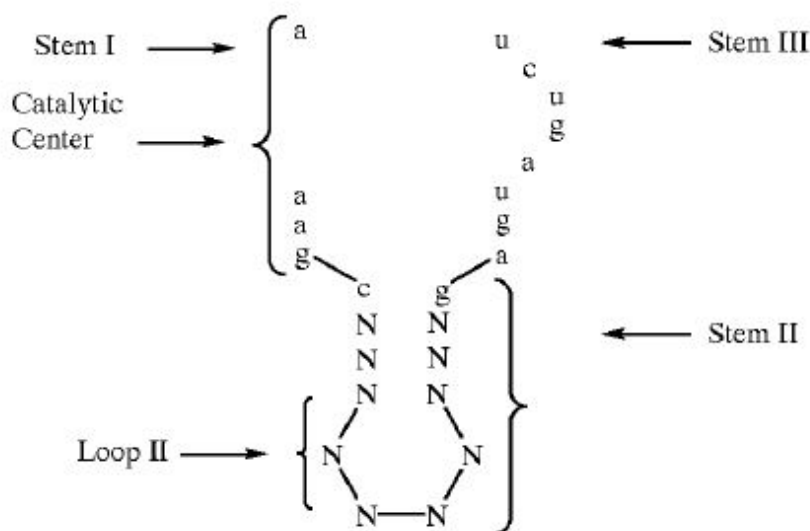




Chimeric RNA-DNA Ribozyme



DESCRIPTION

Since the discovery of Ribozymes (RNA molecules capable of cleaving specific RNA sequences), there has been a lot of interest in using them as both research tools in genetics and therapeutic agents for a wide variety of diseases. The displayed motif is of great interest and is referred to as the "Hammerhead."

Ribozymes contain a ribose sugar in nature; however synthetically produced Ribozymes useful for research and clinical purposes have the sugar moiety replaced with a deoxyribose sugar. This substitution

makes the Ribozymes much more effective as anti-HIV therapeutic agent. The substitution also allows for simpler chemical synthesis, enhanced cellular delivery, and improved stability. This technology combines the chimeric hammerhead ribozyme displayed above with sugar substitution and contains a DNA sequence in its non-conserved region.

KEY ASPECTS

- This chimeric construct can be made with standard DNA and RNA chemical synthesizers
- The velocity profile for this chimeric construct is biphasic
- The DNA in the flanking sequences provides consider intracellular stability for this construct

INTELLECTUAL PROPERTY

Title	Patent Number	Issued
Chimeric DNA-RNA catalytic sequence	6,096,715	08/1/2000

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