

Nucleotide sequence of a maize U6 gene

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The nucleotide sequence of a *Zea mays* U6 gene is presented. A lambda clone containing the U6 gene was isolated from the maize inbred line W22. A subgenomic library was constructed in lambda Zap II (1). The library was screened with a synthetic oligomer complementary to the base sequence 18–39 of the broad bean U6 RNA (2).

Two mismatches were found between the maize U6 sequence and the sequence of the broad bean U6: one in position 11 (G to A substitution) and the second in position 35 (C to T substitution). These sequence differences are underlined. Both substitutions fall outside of the region (bases 44–69) proposed to be involved in base pairing with U4 RNA (3).

As determined by primer extension, the start of the U6 transcript in maize is four bases upstream from that reported for broad bean (bases are underlined) (2). The transcript starts at

a G nucleotide which is typical for polymerase III transcripts (3, 4). The termination of transcription probably occurs within the run of seven T's at the end of the sequence (5).

ACKNOWLEDGEMENT

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REFERENCES

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GTCTCTTCGG¹⁰ AGACATCCGA²⁰ TAAAATTGGA³⁰ ACGATACAGA⁴⁰ GAAGATTAGC⁵⁰ ATGGCCCCTG⁶⁰
 CGCAAGGATG⁷⁰ ACACGCACAA⁸⁰ ATCGAGAAAT⁹⁰ GGTCCAAATT¹⁰⁰ TTTTT

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