

# The nucleotide sequence of an anther-specific gene

Jef Seurinck, Jessie Truettner<sup>1</sup> and Robert B.Goldberg<sup>1\*</sup>

Plant Genetic Systems NV, J.Plateaustr. 22, B-9000 Gent, Belgium and <sup>1</sup>Department of Biology, University of California, Los Angeles, CA 90024 – 1606, USA

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The sequence of a 6.2 kb region containing the tobacco anther-specific gene TA-29 is shown below. This gene was isolated from a Charon 32 library using the TA-29 cDNA as a probe, and is expressed in tapetal cells (R.B.Goldberg, *Science* 240, 1460–1467, 1988). TA-29 has no introns and a continuous coding region of 963 base pairs (underlined). The transcription start site is indicated by a dot, the putative TATA box at position

1446 is underlined, and the arrowhead indicates the transcriptional direction. S1 mapping identified two 3' ends that are boxed. The sequence of a contiguous gene, designated as TSJT1, is also shown. This gene is transcribed in the opposite orientation, is expressed predominantly in the stem, and is active at lower levels in other organs. Three exons and a putative TATA box are underlined.

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GTTTGACAGCTTATCATCGATTATATTAGGGATTTTTACACAAATAGCCGGCTATTAATTTGTTTACTTTTTCTAACCATATACATAGATTATACATTTG
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ATCCCTAGAAAACACATATGCTGTTTTAGGTTGCTATAATGAGAAAAGTTATTTTTAGTCGCTTCCAAATATATTTATATACTTTCTCCGGT
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CCACAATAAGTGATTTTTTGGTGTGTTTCACACAGATTAGAAAATTCACATTTTAAACATTAATAGCAATGAAATGATCATATTAACCTTTACTATTTTC
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\* To whom correspondence should be addressed