Nucleotide sequences of the two high-molecular-weight glutenin genes from the D-genome of a hexaploid bread wheat, *Triticum aestivum* L. cv Cheyenne

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The high-molecular-weight (HMW) glutenins are one of several families of storage proteins found in wheat flour (1). They comprise about 10% of the total protein, and are a critical component contributing to the visco-elastic properties of dough unique to wheat (2-4). Here we report the nucleotide sequence of the two HMW genes from the D-genome of the hexaploid bread wheat *Triticum aestivum* L. cv Cheyenne. These are the Glu-D1-1b and Glu-D1-2b genes coding for the Dx5 and Dy10 HMW subunits, respectively, and have been associated with superior dough quality (3,4). The central, repetitive domain of the genes is indicated by half-brackets, and the TATA and polyadenylation signals are underlined.
REFERENCES


