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the transcriptional target simultaneously. We note that according to this scenario the activator(s) might, like  $\lambda$  repressor, bind DNA cooperatively when present at sufficiently low concentration, but the effect would be mediated not by direct touching between the activators, but rather by indirect interaction.  $\Box$ 

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## CORRECTION

## **Muscle-specific gene expression** controlled by a regulatory element lacking a **MyoD1**-binding site

## Timothy J. Baldwin & Steven J. Burden

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WE reported that muscle-specific gene expression could be conferred by a cis-acting regulatory region in the murine acetylcholine receptor  $\delta$ -subunit gene that lacks a MyoD1binding site. Subsequently, we found that the sequence of several plasmid constructs used in these experiments was different from that reported. We reconstructed these plasmids, verified their sequence and, as studied previously, analysed their ability to confer muscle-specific expression on the c-fos basal promoter (FBP), a tissue-nonspecific promoter. We demonstrated previously that nucleotides -148/-108 of the  $\delta$ -subunit gene are necessary for muscle-specific expression and bind myotube nuclear proteins distinct from MyoD1. We concluded that the MyoD1-binding site (-23/-15) is not sufficient to confer muscle-specific expression, and that an activity distinct from MyoD1 could bind to a cis-acting region necessary for musclespecific expression. We confirm these results. We also reported that the FBP alone conferred low-level expression in C2 myotubes and 3T3 cells, whereas -148/-95/FBP and -148/-53/FBP conferred high level expression only in C2 myotubes. Therefore we concluded that -148/-95, a cis-acting region that lacks a MyoD1-binding site, was sufficient to confer muscle-specific expression upon a tissue-nonspecific promoter. We now find that the FBP alone and -148/-95/FBP confer identical low-level expression in C2 myotubes and 3T3 cells. In addition, -148/-53/FBP confers high-level expression not only in C2 myotube cultures, but also in 3T3 cells. Consequently, we have no evidence that the cis-acting regulatory region that lacks a MyoD1-binding site (-148/-95) is sufficient to confer musclespecific expression. Π



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