

In our recent manuscript (Miyake et al., 2010) we have documented a novel role for the *smad7* gene product in regulating skeletal muscle growth and differentiation. Smad7 protein expression enhances the growth of muscle cells by co-operating with another gene named MyoD . The other aspect of this work that is of some general importance is that the usual cellular localization for Smad7 is at the cell membrane where it is known to function at the level of the transforming growth factor b receptor. Our work indicates that the growth promoting effect of Smad7 in muscle cells is independent of this membrane associated role and is dependent on a previously uncharacterised role in the cell nucleus. These results identify Smad7 as a potential therapeutic factor in muscle wasting conditions such as aging and cancer cachexia.

Reference: Miyake T, Alli NS, **McDermott JC**. Nuclear function of Smad7 promotes myogenesis. Mol Cell Biol. 2009 Dec 7.

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