

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: Primers, promoters and codon-optimized sequences used for creating transgenic reporter construct.

File Name: Supplementary Movie 1

Description: Microinjection of *M. lignano* embryos.

File Name: Supplementary Movie 2

Description: *M. lignano* transgenic animal expressing GFP under control of a muscle-specific promoter MYH6.