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Expression Pattern of *WWP1* in Muscular Dystrophic and Normal Chickens

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The WW domain containing E3 ubiquitin protein ligase 1 (*WWP1*) is classified into one of ubiquitin ligases which play an important role in ubiquitin-proteasome pathway. Previously, we identified the *WWP1* gene as a candidate gene of chicken muscular dystrophy by linkage analysis and sequence comparison. However, the mechanism causing pathological changes and underlying gene function remains elucidated. In the present study, we analyzed the *WWP1* gene expression in various muscles and tissues of normal chickens, and compared with those from muscular dystrophic chickens. Two mRNA isoforms were detected in all tissues examined and revealed almost equal expression level. The *WWP1* expression of dystrophic chickens was decreased in almost all skeletal muscles including unaffected muscles. These data indicate that there might not be a causal relationship between the alteration of *WWP1* expression level and the severity of muscular dystrophy.

Keywords: [chicken](#), [expression analysis](#), [fast twitch muscle fiber](#), [muscular dystrophy](#), [WWPI](#)

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