Analysis of myosin heavy chain mRNA expression by RT-PCR

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#	Paper	IF	Citations
63	Quantification of myosin heavy chain mRNA in somatic and branchial arch muscles using competitive PCR. *American Journal of Physiology - Cell Physiology*, **1998**, 275, C68-74	5.4	55
62	Neuromuscular fatigue during repeated exhaustive submaximal static contractions of knee extensor muscles in endurance-trained, power-trained and untrained men. *Acta Physiologica Scandinavica*, **1999**, 166, 319-26		76
61	Effects of spaceflight and thyroid deficiency on rat hindlimb development. II. Expression of MHC isoforms. *Journal of Applied Physiology*, **2000**, 88, 904-16	3.7	55
60	Role of denervation in modulating IIb MHC gene expression in response to T(3) plus unloading state. *Journal of Applied Physiology*, **2000**, 88, 682-9	3.7	27
59	Myosin heavy chain isoform and ubiquitin protease mRNA expression after passive leg cycling in persons with spinal cord injury. *Archives of Physical Medicine and Rehabilitation*, **2000**, 81, 157-63	2.8	32
58	In vivo regulation of the beta-myosin heavy chain gene in hypertensive rodent heart. *American Journal of Physiology - Cell Physiology*, **2001**, 280, C1262-76	5.4	47
57	Effects of oral creatine and resistance training on myosin heavy chain expression. *Medicine and Science in Sports and Exercise*, **2001**, 33, 1674-81	1.2	122
56	Temporal effects of inactivty on myosin heavy chain gene expression in rat slow muscle. *Muscle and Nerve*, **2001**, 24, 517-26	3.4	53
55	Quantifying the temporospatial expression of postnatal porcine skeletal myosin heavy chain genes. *Journal of Histochemistry and Cytochemistry*, **2002**, 50, 353-64	3.4	48
54	Change of chloride ion channel conductance is an early event of slow-to-fast fibre type transition during unloading-induced muscle disuse. *Brain*, **2002**, 125, 1510-21	11.2	64
53	Selected contribution: acute cellular and molecular responses to resistance exercise. *Journal of Applied Physiology*, **2002**, 93, 394-403	3.7	129
52	Cellular and molecular responses to increased skeletal muscle loading after irradiation. *American Journal of Physiology - Cell Physiology*, **2002**, 283, C1182-95	5.4	151
51	Effects of microgravity on myogenic factor expressions during postnatal development of rat skeletal muscle. *Journal of Applied Physiology*, **2002**, 92, 1936-42	3.7	8
50	Testosterone-induced increase in muscle size in healthy young men is associated with muscle fiber hypertrophy. *American Journal of Physiology - Endocrinology and Metabolism*, **2002**, 283, E154-64	6	285
49	Effects of diet consistency on the myosin heavy chain mRNAs of rat masseter muscle during postnatal development. *Archives of Oral Biology*, **2002**, 47, 109-15	2.8	27
48	The adaptation of soleus and edl in a rat model of distraction osteogenesis: IGF-1 and fibrosis. *Journal of Orthopaedic Research*, **2002**, 20, 1225-31	3.8	17
47	Myosin heavy chain and physiological adaptation of the rat diaphragm in elastase-induced emphysema. *Respiratory Research*, **2003**, 4, 1	7.3	12

46	Specialized cranial muscles: how different are they from limb and abdominal muscles?. *Cells Tissues Organs*, **2003**, 174, 73-86	2.1	64
45	Acute molecular responses of skeletal muscle to resistance exercise in able-bodied and spinal cord-injured subjects. *Journal of Applied Physiology*, **2003**, 94, 2255-62	3.7	80
44	Transcriptional regulation of the type I myosin heavy chain gene in denervated rat soleus. *American Journal of Physiology - Cell Physiology*, **2003**, 284, C738-48	5.4	30
43	Nerve activity-independent regulation of skeletal muscle atrophy: role of MyoD and myogenin in satellite cells and myonuclei. *American Journal of Physiology - Cell Physiology*, **2003**, 285, C1161-73	5.4	101
42	Atrophy responses to muscle inactivity. II. Molecular markers of protein deficits. *Journal of Applied Physiology*, **2003**, 95, 791-802	3.7	91
41	Effect of cyclosporin A treatment on the in vivo regulation of type I MHC gene expression. *Journal of Applied Physiology*, **2004**, 97, 475-83	3.7	20
40	Cloning and sequencing of myosin heavy chain isoform cDNAs in golden-mantled ground squirrels: effects of hibernation on mRNA expression. *Journal of Applied Physiology*, **2004**, 97, 1985-91	3.7	19
39	Inhibition of MAP/ERK kinase prevents IGF-I-induced hypertrophy in rat muscles. *Journal of Applied Physiology*, **2004**, 96, 203-10	3.7	89
38	Skeletal muscle hypertrophy in response to isometric, lengthening, and shortening training bouts of equivalent duration. *Journal of Applied Physiology*, **2004**, 96, 1613-8	3.7	84
37	Effects of denervation on cell cycle control in laryngeal muscle. *JAMA Otolaryngology*, **2004**, 130, 1056-68		26
36	Myosin heavy chain isoform mRNA and protein levels after long-term paralysis. *Biochemical and Biophysical Research Communications*, **2004**, 325, 296-301	3.4	14
35	IL-6-induced skeletal muscle atrophy. *Journal of Applied Physiology*, **2005**, 98, 911-7	3.7	386
34	Pretranslational markers of contractile protein expression in human skeletal muscle: effect of limb unloading plus resistance exercise. *Journal of Applied Physiology*, **2005**, 98, 46-52	3.7	56
33	Phytoestrogen-rich herb formula "XLGB" prevents OVX-induced deterioration of musculoskeletal tissues at the hip in old rats. *Journal of Bone and Mineral Metabolism*, **2005**, 23 Suppl, 55-61	2.9	59
32	Effect of unloading on type I myosin heavy chain gene regulation in rat soleus muscle. *Journal of Applied Physiology*, **2005**, 98, 1185-94	3.7	24
31	Time course of molecular responses of human skeletal muscle to acute bouts of resistance exercise. *Journal of Applied Physiology*, **2005**, 98, 482-8	3.7	129
30	Myosin loss in denervated rat soleus muscle after dexamethasone treatment. *Pathobiology*, **2005**, 72, 108-16	3.6	22
29	Functional, cellular and molecular aspects of skeletal muscle recovery after injury induced by snake venom from Notechis scutatus scutatus. *Toxicon*, **2005**, 45, 789-801	2.8	18

28	Quantification by real-time PCR of developmental and adult myosin mRNA in rat muscles. *Biochemical and Biophysical Research Communications*, **2006**, 340, 165-74	3.4	12
27	Mechanisms underlying myosin heavy chain expression during development of the rat diaphragm muscle. *Journal of Applied Physiology*, **2006**, 101, 1546-55	3.7	33
26	Effects of a nerve-muscle pedicle on the denervated rat thyroarytenoid muscle. *Laryngoscope*, **2006** , 116, 1027-32	3.6	21
25	Maintenance of slow type I myosin protein and mRNA expression in overwintering prairie dogs (Cynomys leucurus and ludovicianus) and black bears (Ursus americanus). *Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology*, **2006**, 176, 709-20	2.2	32
24	Activity-unrelated neural control of myogenic factors in a slow muscle. *Muscle and Nerve*, **2006**, 33, 49-60	3.4	35
23	Obscurin modulates the assembly and organization of sarcomeres and the sarcoplasmic reticulum. *FASEB Journal*, **2006**, 20, 2102-11	0.9	82
22	Dynamics of myosin heavy chain gene regulation in slow skeletal muscle: role of natural antisense RNA. *Journal of Biological Chemistry*, **2006**, 281, 38330-42	5.4	43
21	Effects of CD14-159 C/T polymorphism on CD14 expression and the balance between proinflammatory and anti-inflammatory cytokines in whole blood culture. *Shock*, **2007**, 28, 148-53	3.4	27
20	Controlled differentiation of myoblast cells into fast and slow muscle fibers. *Cell and Tissue Research*, **2008**, 332, 123-32	4.2	16
19	Influence of hyperthyroid conditions on gene expression in extraocular muscles of rats. *Physiological Genomics*, **2009**, 37, 231-8	3.6	5
18	Differential epigenetic modifications of histones at the myosin heavy chain genes in fast and slow skeletal muscle fibers and in response to muscle unloading. *American Journal of Physiology - Cell Physiology*, **2009**, 297, C6-16	5.4	58
17	Calcineurin plays a modulatory role in loading-induced regulation of type I myosin heavy chain gene expression in slow skeletal muscle. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2009**, 297, R1037-48	3.2	16
16	Influence of CD14 polymorphism on CD14 expression in patients with extensive burns. *Burns*, **2009**, 35, 365-71	2.3	5
15	Skeletal muscle growth in young rats is inhibited by chronic exposure to IL-6 but preserved by concurrent voluntary endurance exercise. *Journal of Applied Physiology*, **2009**, 106, 443-53	3.7	55
14	RT-PCR protocols. Preface. *Methods in Molecular Biology*, **2010**, 630, v	1.4	3
13	Gene-family profiling: a normalization-free real-time RT-PCR approach with increased physiological resolution. *Physiological Genomics*, **2010**, 42, 1-4	3.6	16
12	Reverse transcription of the ribonucleic acid: the first step in RT-PCR assay. *Methods in Molecular Biology*, **2010**, 630, 261-70	1.4	5
11	Increased cardiac alpha-myosin heavy chain in left atria and decreased myocardial insulin-like growth factor (Igf-I) expression accompany low heart rate in hibernating grizzly bears. *Physiological and Biochemical Zoology*, **2011**, 84, 1-17	2	14

10	Muscle plasticity in hibernating ground squirrels (Spermophilus lateralis) is induced by seasonal, but not low-temperature, mechanisms. *Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology*, **2011**, 181, 147-64	2.2	52
9	Characterization of human myoblast differentiation for tissue-engineering purposes by quantitative gene expression analysis. *Journal of Tissue Engineering and Regenerative Medicine*, **2011**, 5, e197-206	4.4	13
8	Impact of static magnetic fields on human myoblast cell cultures. *International Journal of Molecular Medicine*, **2011**, 28, 907-17	4.4	8
7	Regulation of an antisense RNA with the transition of neonatal to IIb myosin heavy chain during postnatal development and hypothyroidism in rat skeletal muscle. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2012**, 302, R854-67	3.2	12
6	Increase in cardiac myosin heavy-chain (MyHC) alpha protein isoform in hibernating ground squirrels, with echocardiographic visualization of ventricular wall hypertrophy and prolonged contraction. *Journal of Experimental Biology*, **2013**, 216, 4678-90	3	21
5	Evaluation of the effects of different culture media on the myogenic differentiation potential of adipose tissue- or bone marrow-derived human mesenchymal stem cells. *International Journal of Molecular Medicine*, **2014**, 33, 160-70	4.4	40
4	Evaluation of the effect of static magnetic fields combined with human hepatocyte growth factor on human satellite cell cultures. *Molecular Medicine Reports*, **2014**, 9, 2328-34	2.9	3
3	Expression of MyHC isoforms mRNA transcripts in different regions of the masseter and medial pterygoid muscles in chimpanzees. *Archives of Oral Biology*, **2017**, 83, 63-67	2.8	1
2	Regulation of myosin heavy chain antisense long noncoding RNA in human vastus lateralis in response to exercise training. *American Journal of Physiology - Cell Physiology*, **2020**, 318, C931-C942	5.4	3
1	Comparison of myosin heavy chain mRNAs, protein isoforms and fiber type proportions in the rat slow and fast muscles. *Physiological Research*, **2013**, 62, 445-53	2.1	13