



## Anti-Potassium channel Kv1.4 autoantibodies

### Indications

Myasthenia gravis

### see also

- ▶ [Autoantibodies in disease of neuromuscular transmission](#)
- ▶ [Anti-Potassium channel autoantibodies - Overview](#)

### Incidence

- ▶ Myasthenia gravis

English text version in progress.

- ▶ Click the flags on the right of the blue title line for German or Italian text versions.

### Literature

Ohta M, Ohta K, Itoh N, Kurobe M, Hayashi K, Nishitani H: Anti-skeletal muscle antibodies in the sera from myasthenic patients with thymoma: identification of anti-myosin, actomyosin, actin, and alpha-actinin antibodies by a solid-phase radioimmunoassay and a western blotting analysis. *Clin Chim Acta* (1990) 187(3): 255 - 264 (PMID: [2323065](#)).

Philipson LH, Schaefer K, LaMendola J, Bell GI, Steiner DF: Sequence of a human fetal skeletal muscle potassium channel cDNA related to RCK4. *Nucleic Acids Res* (1990); 18(23): 7.160 (PMID: [2263489](#)).

Romi F, Suzuki S, Suzuki N, Petzold A, Plant GT, Gilhus NE: Anti-voltage-gated potassium channel Kv1.4 antibodies in myasthenia gravis. *J Neurol* (2012); 259(7): 1.312 - 1.316 (PMID: [22167224](#)).

Suzuki S, Satoh T, Yasuoka H, Hamaguchi Y, Tanaka K, Kawakami Y, Suzuki N, Kuwana M: Novel autoantibodies to a voltage-gated potassium channel Kv1.4 in a severe form of myasthenia gravis. *J Neuroimmunol* (2005); 170(1-2): 141 - 149 (PMID: [16182377](#)).

Suzuki S, Utsugisawa K, Nagane Y, Satoh T, Terayama Y, Suzuki N, Kuwana M: Classification of myasthenia gravis based on autoantibody status. *Arch Neurol* (2007); 64(8): 1.121 - 1.124 (PMID: [17698702](#)).

Suzuki S, Utsugisawa K, Yoshikawa H, Motomura M, Matsubara S, Yokoyama K, Nagane Y, Maruta T, Satoh T, Sato H, Kuwana M, Suzuki N: Autoimmune targets of heart and skeletal muscles in myasthenia gravis. *Arch Neurol* (2009); 66(11): 1.334 - 1.338 (PMID: [19752287](#)).

Suzuki S, Utsugisawa K, Nagane Y, Suzuki N: Three types of striational antibodies in myasthenia gravis. *Autoimmune Dis* (2011); (PMID: [21785709](#)).

Suzuki S, Baba A, Kaida K, Utsugisawa K, Kita Y, Tsugawa J, Ogawa G, Nagane Y, Kuwana M, Suzuki N: Cardiac involvements in myasthenia gravis associated with anti-Kv1.4 antibodies. *Eur J Neurol* (2013); (PMID: [23829303](#)).

Suzuki S, Nishimoto T, Kohno M, Utsugisawa K, Nagane Y, Kuwana M, Suzuki N: Clinical and immunological predictors of prognosis for Japanese patients with thymoma-associated myasthenia gravis. (2013); *J Neuroimmunol* 258(1-2): 61 - 66 (PMID: [23561592](#)).

Takaya M, Kawahara S, Namba T, Grob D: Antibodies against myofibrillar proteins in myasthenia gravis patients. *Tokai J Exp Clin Med* (1992); 17(1): 35 - 39 (PMID: [1523691](#)).

Tamkun MM, Knoth KM, Walbridge JA, Kroemer H, Roden DM, Glover DM: Molecular cloning and characterization of two voltage-gated K<sup>+</sup> channel cDNAs from human ventricle. *FASEB J* (1991); 5(3): 331 - 337 (PMID: [2001794](#)).



## Anti-Potassium channel Kv1.4 autoantibodies



Williams CL, Lennon VA: Thymic B lymphocyte clones from patients with myasthenia gravis secrete monoclonal striational autoantibodies reacting with myosin, alpha actinin, or actin. *J Exp Med* (1986); 164(4): 1.043 - 1.059 (PMID: [3020150](#)).

Williams CL, Lennon VA, Momoi MY, Howard FM Jr: Serum antibodies and monoclonal antibodies secreted by thymic B-cell clones from patients with myasthenia gravis define striational antigens. *Ann N Y Acad Sci* (1987) 505: 168 - 179 (PMID: [3500666](#)).