



Anti-Potassium channel autoantibodies - Overview

Table 1 Antigen specificity of known anti-potassium channel autoantibodies

Channel type	Indications - Diseases
Voltage gated potassium channels (VGKC)	
▶ Kv1.1	Neuromyotonia, Morvan syndrome
▶ Kv1.2	Neuromyotonia, Morvan syndrome
▶ Kv1.4	Myasthenia gravis
▶ Kv1.6	Neuromyotonia, Morvan syndrome
▶ Kv4.2 (auxiliary subunit DPPX)	Encephalitis, Hyperexcitability
▶ Kv7.1	Cardiomyopathies
▶ Kir2.1	?
▶ Kir2.6	?
▶ Kir4.1	Multiple sclerosis
Channel complexes	
constituted of the pore forming proteins: ▶ Kv1.1 ▶ Kv1.2 ▶ Kv1.6 ▶ and associated proteins, identified as antigen (see below) and probably further unknown antigens.	Neuromyotonia, Morvan syndrome, limbic encephalitis, paraneoplastic neuropathies
Channel associated proteins	
▶ CASPR2 ▶ Lg1 ▶ Tag1 / Contactin 2	Neuromyotonia, Morvan syndrome, limbic encephalitis, paraneoplastic neuropathies
Protein G activated channels	
▶ M2-mAcetylcholine receptor	Cardiomyopathies