

TEST CHANGE

Voltage-Gated Potassium Channel (VGKC) Antibody with Reflex to LGI1 and CASPR2 Screen and Titer, Serum

Effective Date: August 21, 2023

2009463, VGKC R

Specimen Requirements:		
Patient Preparation:		
Collect:	Plain red or serum separator tube.	
Specimen Preparation:	Separate serum from cells within 1 hour. Transfer 4 mL serum to an ARUP Standard Transport Tube. (Min: 0.5 mL)	
Transport Temperature:	Refrigerated.	
Unacceptable Conditions:	Plasma. Severely lipemic or icteric specimens.	
Remarks:		
Stability:	After separation from cells: Ambient: 72 hours; Refrigerated: 2 weeks; Frozen: 1 month (avoid repeated freeze/thaw cycles)	
Methodology:	Quantitative Radioimmunoassay/Semi-Quantitative Cell-Based Indirect Fluorescent Antibody	
Performed:	Tue	
Reported:	1-8 days	
Note:	If VGKC is Indeterminate or Positive, LGI1 Antibody IgG and CASPR2 Antibody IgG will be added. If LGI1 antibody IgG is positive, then LGI1 antibody IgG titer will be added. If CASPR2 antibody IgG is positive, then CASPR2 antibody IgG titer will be added. Additional charges apply.	
CPT Codes:	83519; if reflexed add 86255 x2; if reflexed add 86256 per titer	
New York DOH Approval Status:	This test is New York DOH approved.	
Interpretive Data:		

Voltage-Gated Potassium Channel (VGKC) antibodies are associated with neuromuscular weakness as found in neuromyotonia (also known as Issacs syndrome) and Morvan syndrome. VGKC antibodies are also associated with paraneoplastic neurological syndromes and limbic encephalitis; however, VGKC antibody-associated limbic encephalitis may be associated with antibodies to leucine-rich, glioma-inactivated 1 protein (LGI1) or contactin-associated protein-2 (CASPR2) instead of potassium channel antigens. A substantial number of VGKC-antibody positive cases are negative for LGI1 and CASPR 2 IgG autoantibodies, not all VGKC complex antigens are known. The clinical significance of this test can only be determined in conjunction with the



patient's clinical history and related laboratory testing.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

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Component	Interpretation	
Voltage-Gated Potassium Channel (VGKC) Antibody, Serum	Negative Indeterminate Positive	31 pmol/L or less 32-87 pmol/L 88 pmol/L or greater

Reference Interval:

Test Number	•	Reference Interval
	Voltage-Gated Potassium Channel Ab, Ser	31 pmol/L or less