## **RSR**

## **TECHNICAL INFORMATION**

## P-TYPE VOLTAGE-GATED CALCIUM CHANNEL (VGCC) AUTOANTIBODY RIA KIT RIARSR™ VGCC Ab



**Description:** Radioimmunoassay (RIA) kit for the determination of autoantibodies to P-type voltage-

gated calcium channels (VGCC) in serum

Disease application: Lambert-Eaton myasthenic syndrome (LEMS)

**Test samples:** Sera can be used. Do not use lipaemic or haemolysed samples or plasma samples.

No interference is observed with bilirubin up to 20 mg/dL, haemoglobin up to 500 mg/dL or

intralipid up to 3,000 mg/dL.

**Sample volume:** 15 μL for 1 patient sample for 1 assay (25 μL per tube after dilution)

**Total assay time:** Approx. 3 hours

Assay method: Controls, samples into tubes + 125 VGCC

Add anti-human IgG

1 hr incubation

2 x; wash
20 min centrifuge

Aspirate + count

**Sensitivity:** 100% n = 50 for LEMS patients

**Specificity:** 100% n = 160 for healthy blood donors

Calibrator range: N/A

Cut-off: Negative: ≤30pmoles/L; Positive: >30pmoles/L

**Lower detection limit:** 2.86 pmoles/L (mean + 2 standard deviations in assay of negative control; n = 20)

Advantages: Easy assay format suitable for use in routine clinical laboratories, providing a specific and

sensitive assay for VGCC autoantibodies.

Features: Reliable and convenient method to measure specific P-type VGCC autoantibodies, which

are a specific marker for LEMS. Measurement of VGCC autoantibodies can be of

considerable value in distinguishing LEMS from Myasthenia Gravis (MG) when full clinical features may not be apparent and early intervention may prevent or delay disability, and

also, may be of help for complications with small cell lung carcinoma (SCLC).

Kit size: 25 tubes

Order code: LEMS/25

Literature: M Motomura et al, J Neurol Neurosurg Psychiatry 1995 58:85-87

An improved diagnostic assay for Lambert-Eaton myasthenic syndrome

V A Lennon et al, N Engl J Med 1995 332:1467-1474Calcium-channel antibodies in the

Lambert-Eaton syndrome and other paraneoplastic syndromes

I Matthews et al, Clin Chim Acta 2004 348:95-99

Muscle-specific receptor tyrosine kinase autoantibodies – a new immunoprecipitation

assay

This kit is intended for in-vitro use by professional persons only. The data quoted is for guidance only. Each laboratory should establish its own normal and pathological reference ranges for the assay and should include its own panel of control samples in the assay along with the controls provided as part of the kit.