MAYO CLINIC LABORATORIES

1-800-533-1710

PLAIF

Phospholipase A2 Receptor (PLA2R) Frozen IF, Renal

Patient ID	Patient Name		Birth Date	Gender	Age
SA00090842	TESTING, GRACE		1999-01-01	F	18
Order Number	**Client Order Number**	**Ordering Physician**	**Report Notes**		
SA00090842	SA00090842	CLIENT, CLIENT			
Account Information		**Collected**			
C7028846 DLMP Rochester		18 May 2017 00:00			

PLA2R Immunofluorescence

Case Number CR-17-3496

Interpretation

MCR

IMMUNOFLUORESCENCE STAINING FOR PLA2R:

PLA2R is positive in glomeruli.

Serum testing for PLA2R antibodies may be useful as an adjunct in following/managing patients with membranous nephropathy. Antibody levels have been shown to correlate with disease activity and risk of recurrence after kidney transplantation. The serum test is available through Mayo Medical Laboratories (MML) as test ID "PLA2R".

Autoantibody formation against phospholipase A2 receptor (PLA2R) has been established as the underlying etiology in most cases of primary membranous nephropathy. The reported sensitivity and specificity of PLA2R staining on kidney biopsies for adult primary membranous nephropathy are 69–75% and 83%, respectively. PLA2R staining is negative in almost all cases of membranous nephropathy due to lupus but positive in approximately 25% of cases of membranous nephropathy associated with neoplasm, 75% of cases associated with sarcoidosis, and 64% of cases of cases associated with hepatitis C infection. PLA2R staining is not sensitive in childhood primary membranous nephropathy (sensitivity of 45%). In the transplant setting, PLA2R staining is positive in 83% of cases of recurrent membranous nephropathy compared to only 8% of cases of de novo membranous nephropathy. Ten percent of patients with PLA2R-negative primary membranous nephropathy have antibodies directed against another podocytes antigen, thrombospondin type-1 domain-containing 7A (THSD7A).

References:

1. Larsen CP, et al. Determination of primary versus secondary membranous glomerulopathy utilizing phospholipase A2 receptor staining in renal biopsies. Mod Pathol. 2013 May;26(5):709–15.
2. Svobodova B, et al. Kidney biopsy is a sensitive tool for retrospective diagnosis of PLA2R-related membranous nephropathy. Nephrol Dial Transplant. 2013 Jul;28(7):1839–44.
3. Cossey LN, et al. Phospholipase A2 receptor staining in pediatric idiopathic membranous glomerulopathy. Pediatr Nephrol. 2013 Dec;28(12):2307–11.
4. Larsen CP, et al. Phospholipase A2 receptor (PLA2R) staining is useful in the determination of de novo versus recurrent membranous glomerulopathy. Transplantation. 2013 May 27;95(10):1259–62.
5. Tomas NM, et al. Thrombospondin type-1 domain-containing 7A in idiopathic membranous nephropathy. N Engl J Med. 2014 Dec 11;371(24):2277–87.

Report electronically signed by MCR

MATTHEW RUETER

I verify that I have examined all relevant slides/materials for the specimen(s) and rendered or confirmed the diagnosis.

Performing Site Legend

Code	Laboratory	Address	Lab Director	CLIA Certificate
MCR	Mayo Clinic Laboratories - Rochester Main Campus	200 First Street SW, Rochester, MN 55905	William G. Morice M.D. Ph.D	24D0404292

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Gross Description

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Immunofluorescence: Received in Zeus for immunofluorescence: 1 piece(s) of tissue measuring 0.4 x 0.04 cm. Submitted in total for immunofluorescence. (GEJ)

Material Received

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A. K17–123: Left kidney

1 - Zeus wet tissue

Disclaimer

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This test was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

Received: 19 May 2017 12:33

Reported: 22 May 2017 11:29

Performing Site Legend

Code	Laboratory	Address	Lab Director	CLIA Certificate
MCR	Mayo Clinic Laboratories - Rochester Main Campus	200 First Street SW, Rochester, MN 55905	William G. Morice M.D. Ph.D	24D0404292