

# Novel ELISA (using KM55) Specifically detects Gd-IgA1

## #27600 Gd-IgA1 (Galactose-deficient IgA1)

Serum, EDTA-plasma and Urine

# IgA Nephropathy

**Galactose-deficient IgA1 (Gd-IgA1)** attracts a lot of attentions as a critical effector molecule in the pathogenesis and progression of **IgA nephropathy (IgAN)** in recent studies.

It has been suggested that several O-link glycans modified regions exist in the heavy chain hinge region of human IgA1 molecule and Gd-IgA1 circulates in blood stream of the patients with the pathological condition of IgAN.

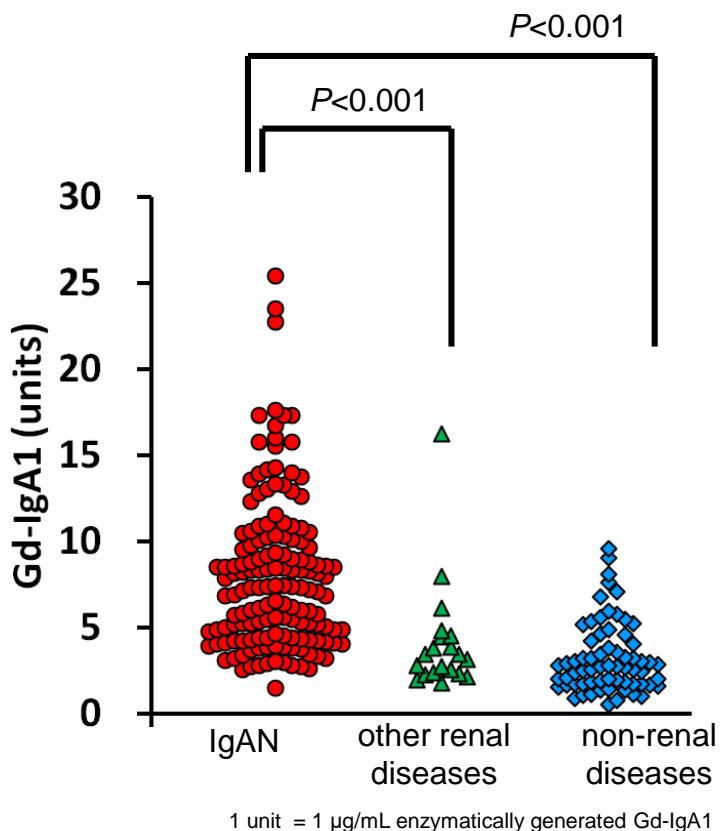
The measuring system using **snail (helix aspersa; HAA) lectin** that is extracted from snail has been used in past numerous studies and it was revealed that serum levels of Gd-IgA1 in patients with IgAN is significantly elevated compared with the level of healthy subjects or patients with renal diseases other than IgAN. Thus, the importance and purpose of measuring serum Gd-IgA1 level have been gradually recognized from such studies.

However, since the measuring system used HAA lectin is not suitable for measuring multiple and massive samples in large scale studies due to its instability of glycan-recognizing activity, development of alternative measuring system that can quantitatively measure human Gd-IgA1 in serum with stable and reliable data has been considered as an essential and urgent matter. This IBL ELISA kit using the monoclonal antibody that specifically recognizes galactose-deficient hinge sequence of human Gd-IgA1 is a lectin non-dependent measuring system that can quantitatively measure Gd-IgA1 in human serum, which is also suitable for large scale studies because of its stability.

### 【Reference】

Novel lectin-independent approach to detect galactose-deficient IgA1 in IgA nephropathy. Yasutake J et al. Nephrol Dial Transplant. 2015 Aug;30(8):1315-21.

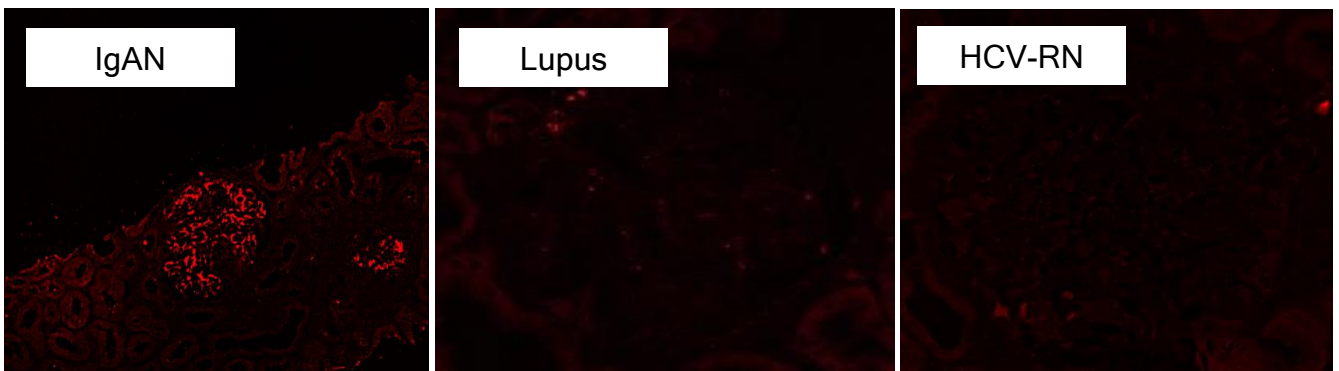
## Gd-IgA1 Level in Serum



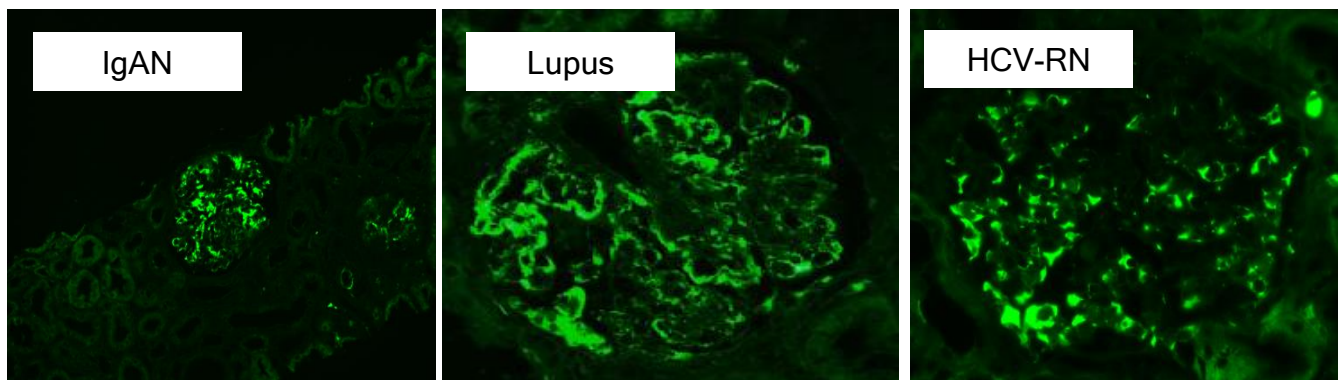
## Novel Antibody (KM55) Specifically staining IgAN

[#10777 Anti-Human Gd-IgA1 \(KM55\) for IHC](#)

### KM55 MoAb



### Anti-IgA



#### 【Reference】

IgA nephropathy and IgA vasculitis with nephritis have a shared feature involving galactose-deficient IgA1-oriented pathogenesis. Suzuki H et al. *Kidney Int.* 2018 Jan 9. pii: S0085-2538(17)30799-8.

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