

Code No. 10777

**Anti-Human  
Gd-IgA1(KM55) Rat IgG MoAb**

Volume : 100 µg

Lot No. :

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- Introduction** : 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 deposition of Gd-IgA1 in glomeruli is considered to be involved in IgAN (Multi-hit Hypothesis of Gd-IgA1). The measuring system using snail (*Helix aspersa*; HAA) lectin that is extracted from snail and Gd-IgA1 ELISA (Code: 27600 Gd-IgA1 (Galactose-deficient IgA1) Assay Kit using this antibody (KM55) have been used in numerous studies and it has been suggested that serum level of Gd-IgA1 in patients with IgAN is significantly elevated compare with the level of healthy subject or patients with renal disease other than IgAN in such studies. In addition, this antibody (KM55) can detect Gd-IgA1 in tissue by IHC technique differently from the feature of HAA lectin and it has been revealed that Gd-IgA1 specifically exists in glomeruli of the patients of IgAN from the studies using this antibody. It has been expected that clinical significance of Gd-IgA1 will be revealed by further studies using this antibody.
- Antigen** : Human IgA1 hinge region peptide with GalNAc  
H-C<sub>223</sub>PST\*PPT\*PS\*PS\*TPPT\*PSPS<sub>240</sub>-NH<sub>2</sub>  
(\*with GalNAc)
- Source** : Mouse-Rat hybridoma
- Clone** : KM55                      **Subclass** : Rat IgG<sub>2b</sub>
- Purification** : Affinity purified with protein A
- Form** : Lyophilized product from PBS containing 1 % BSA and 0.05 % NaN<sub>3</sub>
- How to use** : 1 mL deionized water will be added to the product, then its concentration comes to 100 µg/mL
- Stability** : Lyophilized product, 5 years at 2 - 8 °C  
: Solution, 2 years at -20 °C
- Application** : This antibody can be used for immunohistochemistry with formalin fixed paraffin embedded tissues after antigen retrieval. The recommended concentration is about 100µg/mL, however, the concentration should be optimized by each laboratory. Method of immunogen activation treatment: Protease treatment for 2 hours at room temperature is required after removing paraffin and rehydration. (Recommended to use: Subtilisin A, Sigma).
- 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.

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*For research use only, not for use in diagnostic procedures.*