

Code No. 29030

**Anti-Human  
LGP2 Rabbit IgG Affinity Purify**Volume : 100  $\mu$ g

**Introduction** : A full-length cDNA encoding mouse LGP2 was cloned by computational analysis, RT-PCR, and RACE of liver and mammary tissue total RNA. And human LGP2 was also cloned. Yoneyama et al. have identified a DExD/H box-containing RNA helicase, retinoic acid inducible gene I (RIG-I), as an essential component of the sensor of intracellular dsRNA (1). Furthermore, two other DexD/H-box-containing RNA helicases, MDA5 and LGP2, were found in the mammalian database (2). MDA5 acts as a positive regulator in the virus-induced activation of type I IFN genes. On the other hand, LGP2 functions as a dominant-negative regulator of RIG-I/MDA5-mediated signaling. These molecules have critical roles for antiviral innate immune responses.

**Antigen** : Synthetic peptide of part of c terminal of human LGP2 (IQAKKWSRVPFSV)

**Purification** : Purified with antigen peptide

**Form** : Lyophilized product from 1% BSA in PBS containing 0.05% NaN<sub>3</sub>

**How to use** : 1.0 mL deionized water will be added to the product (the conc. comes up 100  $\mu$ g/mL)

**Stability** : Lyophilized product, 5 years at 2 – 8 °C  
: Solution, 2 years at –20 °C

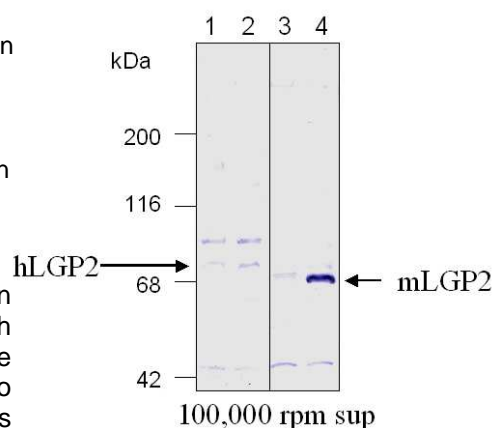
**Application** : Western blotting in concentration of 1 – 5  $\mu$ g/mL

**Specificity** : Reacts with human and mouse LGP2

**Reference** : 1. Yoneyama M, Kikuchi M, Natsukawa T, Shinobu N, Imaizumi T, Miyagishi M, Taira K, Akira S, Fujita T. The RNA helicase RIG-I has an essential function in double-stranded RNA-induced innate antiviral responses. *Nat Immunol.* 2004 Jul; 5 (7):730-7.  
2. Yoneyama M, Kikuchi M, Matsumoto K, Imaizumi T, Miyagishi M, Taira K, Foy E, Loo YM, Gale M Jr, Akira S, Yonehara S, Kato A, Fujita T. Shared and unique functions of the DExD/H-box helicases RIG-I, MDA5, and LGP2 in antiviral innate immunity. *J Immunol.* 2005 Sep 1;175 (5):2851-8.

**Example** : lane 1:  
HeLa cell lysate without IFN  $\beta$  stimulation  
lane 2:  
HeLa cell lysate with IFN  $\beta$  stimulation  
lane 3:  
L929 cell lysate without IFN  $\beta$  stimulation  
lane 4:  
L929 cell lysate with IFN  $\beta$  stimulation

When this antibody is used in Western Blotting, several bands appear although the antibody specifically detects the LGP2 protein. We recommend to perform positive and negative controls in parallel.



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