

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% NaN₃

1.0 mL deionized water will be added to the product (the conc. comes up 100 μ g/mL) How to use

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 β stimulation

lane 2:

HeLa cell lysate with IFN β stimulation

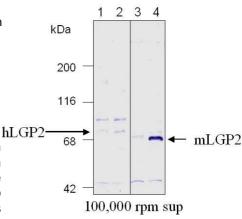
lane 3:

L929 cell lysate without IFN β stimulation

lane 4:

L929 cell lysate with IFN β 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.



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

