

**Goat Anti-LGP2 Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF1621a

### Specification

#### Goat Anti-LGP2 Antibody - Product Information

Application	WB, IHC, Pep-ELISA
Primary Accession	<a href="#">Q96C10</a>
Other Accession	<a href="#">NP_077024, 79132</a>
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	76613

#### Goat Anti-LGP2 Antibody - Additional Information

##### Gene ID 79132

##### Other Names

Probable ATP-dependent RNA helicase DHX58, 3.6.4.13, Probable ATP-dependent helicase LGP2, Protein D11Lgp2 homolog, RIG-I-like receptor 3, RLR-3, RIG-I-like receptor LGP2, RLR, DHX58, D11LGP2E, LGP2

##### Dilution

WB~~1:1000  
IHC~~1:100~500  
Pep-ELISA~~N/A

##### Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

##### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

##### Precautions

Goat Anti-LGP2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### Goat Anti-LGP2 Antibody - Protein Information

Name [DHX58 \(HGNC:29517\)](#)

Synonyms D11LGP2E, LGP2

**Function**

Acts as a regulator of RIGI and IFIH1/MDA5 mediated antiviral signaling. Cannot initiate antiviral signaling as it lacks the CARD domain required for activating MAVS/IPS1-dependent signaling events. Can have both negative and positive regulatory functions related to RIGI and IFIH1/MDA5 signaling and this role in regulating signaling may be complex and could probably depend on characteristics of the infecting virus or target cells, or both. Its inhibitory action on RIG-I signaling may involve the following mechanisms: competition with RIGI for binding to the viral RNA, binding to RIGI and inhibiting its dimerization and interaction with MAVS/IPS1, competing with IKBKE in its binding to MAVS/IPS1 thereby inhibiting activation of interferon regulatory factor 3 (IRF3). Its positive regulatory role may involve unwinding or stripping nucleoproteins of viral RNA thereby facilitating their recognition by RIGI and IFIH1/MDA5. Involved in the innate immune response to various RNA viruses and some DNA viruses such as poxviruses and coronavirus SARS-CoV-2, and also to the bacterial pathogen Listeria monocytogenes (PubMed:<a href="http://www.uniprot.org/citations/31256877" target="\_blank">31256877</a>). Can bind both ssRNA and dsRNA, with a higher affinity for dsRNA. Shows a preference to 5'-triphosphorylated RNA, although it can recognize RNA lacking a 5'-triphosphate.

**Cellular Location**

Cytoplasm.

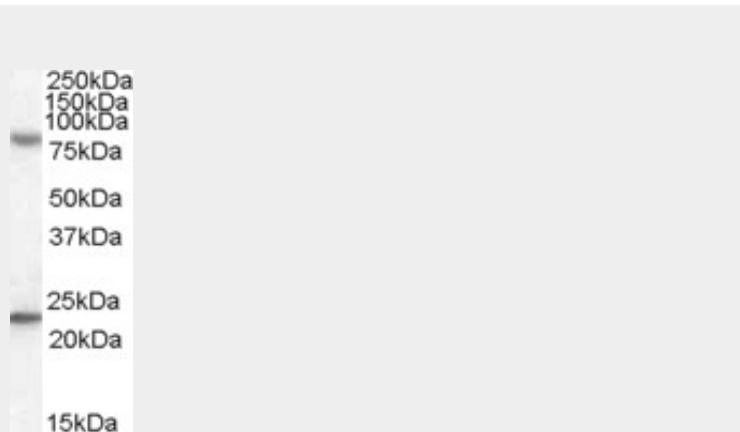
**Tissue Location**

Expressed in testis, nerve and spleen. Also expressed in the brain.

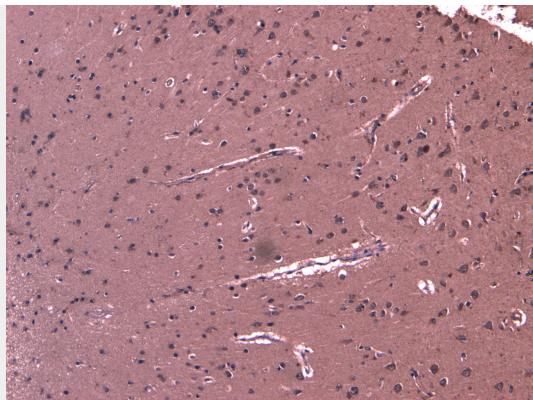
**Goat Anti-LGP2 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

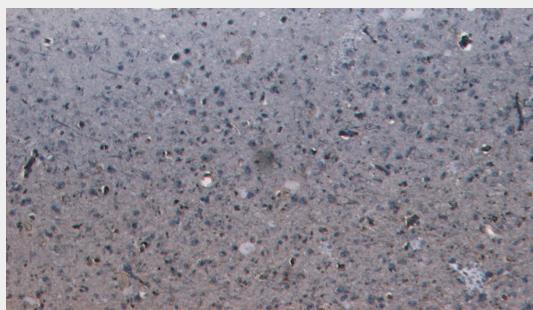
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Goat Anti-LGP2 Antibody - Images**

EB07981 (0.3 $\mu$ g/ml) staining of Human Liver lysate (35 $\mu$ g protein in RIPA buffer). Detected by chemiluminescence.



EB07981 (8µg/ml) staining of paraffin embedded Human Cortex. Heat induced antigen retrieval with citrate buffer pH 6, HRP-staining.



EB07981 Negative Control showing staining of paraffin embedded Human Cortex, with no primary antibody.

#### Goat Anti-LGP2 Antibody - References

Large-scale candidate gene analysis of spontaneous clearance of hepatitis C virus. Mosbruger TL, et al. *J Infect Dis*, 2010 May 1. PMID 20331378.

A shared interface mediates paramyxovirus interference with antiviral RNA helicases MDA5 and LGP2. Parisien JP, et al. *J Virol*, 2009 Jul. PMID 19403670.

The RIG-I-like receptor LGP2 recognizes the termini of double-stranded RNA. Li X, et al. *J Biol Chem*, 2009 May 15. PMID 19278996.

Structure and function of LGP2, a DEX(D/H) helicase that regulates the innate immunity response. Murali A, et al. *J Biol Chem*, 2008 Jun 6. PMID 18411269.

Regulation of innate antiviral defenses through a shared repressor domain in RIG-I and LGP2. Saito T, et al. *Proc Natl Acad Sci U S A*, 2007 Jan 9. PMID 17190814.