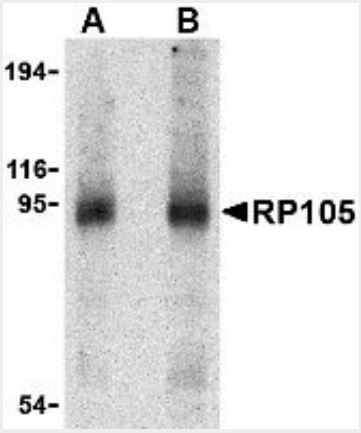
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609

RP105 Antibody
Catalog # ASC10430

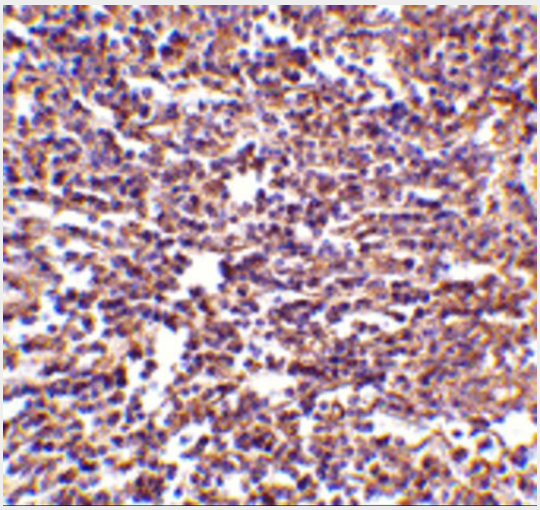
Specification

RP105 Antibody - Product Information

Application	**WB, IHC, IF**
Primary Accession	Q99467
Other Accession	BAA12019, 1843411
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**RP105 antibody can be used for the detection of RP105 by Western blot at 0.5 - 1 µg/mL. Despite its predicted molecular weight, RP105 often migrates at 95 - 105 kDa. Antibody can also be used for immunohistochemistry starting at 2 µg/mL. For immunofluorescence start at 10 µg/mL.**



Western blot analysis of RP105 in human spleen tissue lysate with RP105 antibody at (A) 0.5 and (B) 1 µg/mL.



Immunohistochemistry of RP105 in human spleen tissue with RP105 antibody at 2 µg/mL.

RP105 Antibody - Additional Information

Gene ID	**4064**

Other Names
RP105 Antibody: LY64, Ly78, RP105, LY64, CD180 antigen, Lymphocyte antigen 64, CD180 molecule

Target/Specificity
CD180;

Reconstitution & Storage
RP105 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
RP105 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

RP105 Antibody - Protein Information

Name CD180

Synonyms LY64, RP105

Function
May cooperate with MD-1 and TLR4 to mediate the innate immune response to bacterial lipopolysaccharide (LPS) in B-cells. Leads to NF- kappa-B activation. Also involved in the life/death decision of B-cells (By similarity).

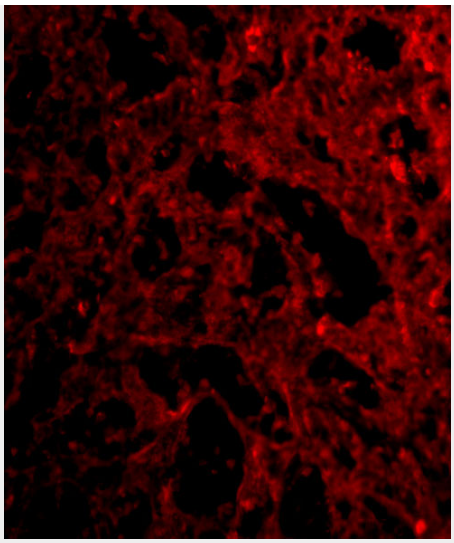
Cellular Location
Cell membrane; Single-pass type I membrane protein

Tissue Location
Expressed mainly on mature peripherical B cells. Detected in spleen, lymph node and appendix. Not detected in pre-B and -T cells

RP105 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 Cytomety
- Cell Culture



Immunofluorescence of RP105 in human spleen tissue with RP105 antibody at 10 µg/mL.

RP105 Antibody - Background

RP105 Antibody: Toll-like receptors (TLRs) are evolutionarily conserved pattern-recognition molecules resembling the toll proteins that mediate antimicrobial responses in Drosophila. These proteins recognize different microbial products during infection and serve as an important link between the innate and adaptive immune responses. The signaling of these TLRs is kept under tight control by the expression of endogenous inhibiting proteins. One such protein is RP105, a recently identified homolog to TLR4 that, with MD-1, interacts with and inhibits the TLR4/MD-2 signaling pathway. It has also been suggested that the RP105/MD-1 complex influences antibody production mediated by both TLR4/MD-2 and TLR2 receptor complexes.

RP105 Antibody - References

Takeda K, Kaisho T, and Akira S. Toll-like receptors. Annu. Rev. Immunol. 2003; 21:335-76.
Janeway CA Jr. and Medzhitov R. Innate immune recognition. Annu. Rev. Immunol. 2002; 20:197-216.
Divanovic S, Trompette A, Atabani SF, et al. Inhibition of TLR-4/MD-2 signaling by RP105/MD-1. J. Endotoxin Res. 2005; 11:363-8.
Nagai Y, Kobayashi T, Motoi Y, et al. The radioprotective 105/MD-1 complex links TLR2

and TLR4/MD-2 in antibody response to microbial membranes. J. Immunol. 2005; 174:7043-9.