



Anti-Toll-like receptor 9 isoform A (TLR9), Chicken-Polyclonal Antibody

Catalog No. PY-10155
Antigen species: Human
Host species: Chicken

Quantity: 100µg
Reactivity: Human
Form: Antigen affinity purified antibody

Applications tested: Western blot

Target description

TLR9 is a member of the Toll-like receptor (TLR) family that plays a fundamental role in pathogen recognition and activation of innate immunity. TLRs are highly conserved from *Drosophila* to humans and share structural and functional similarities. They recognize pathogen-associated molecular patterns (PAMPs) that are expressed on infectious agents, and mediate the production of cytokines necessary for the development of effective immunity. The various TLRs exhibit different patterns of expression. TLR9 gene is preferentially expressed in immune cell rich tissues, such as spleen, lymph node, bone marrow and peripheral blood leukocytes. Studies in mice and human indicate that this receptor mediates cellular response to unmethylated CpG dinucleotides in bacterial DNA to mount an innate immune response.

Antigen

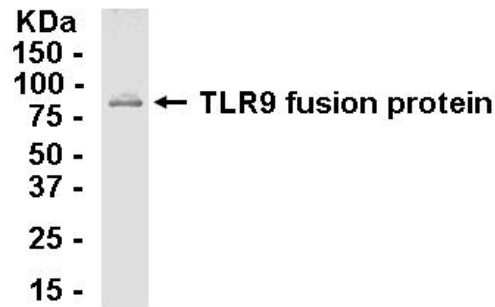
This polyclonal antibody was raised by immunizing chicken with TLR9 fusion protein (311-465 amino acids).

Application

Western blotting, tissue or cell immunostaining. Recommended starting dilution for Western blot analysis is 1:500, for tissue or cell staining is 1:200. Optimal working dilutions must be determined by the end user.

Related Products

1. Anti- Toll-like receptor 2 (TLR2), Chicken pAb (PY-10152)
2. Anti- Toll-like receptor 3 (TLR3), Chicken pAb (PY-10154)
3. Anti- Toll-like receptor 7 (TLR7), Chicken pAb (PY-10148)



E. coli-derived fusion protein as test antigen.

Western blot Protocol

1. Block membrane with 5% non-fat milk in PBS-T for 1 hour at room temperature or longer at 4°C.
2. Incubate membrane with IgY antibodies at dilution of 1: 2,000 with 1% milk in PBS-T at R.T. for 1 h.
3. Rinse 3 times with PBS-T, then wash membrane with PBS-T, 5 min each, total of 3 times.
4. Incubate with 2nd antibody (goat-anti-IgY/Fc-HRP) at dilution 1:1,000 for ECL (with 1% milk PBS-T) at R.T. for 1h.
5. Rinse 3 times with PBS-T, then wash with PBS-T, 5 min each with shaking, total of 3 times.
6. Perform ECL detection of signal using Pierce ECL kit.

Storage

It is supplied as antigen affinity purified antibody in lyophilized powder. Redissolve the powder with 100 microliter sterile water will restore to the original concentration 1mg/ml (1xPBS). Store at 4°C for short-term application. For long-term storage, aliquot and store at -20°C.

References

Takeshita, F.; Leifer, C. A.; Gursel, I.; Ishii, K. J.; Takeshita, S.; Gursel, M.; Klinman, D. M.: Cutting edge: role of Toll-like receptor 9 in CpG DNA-induced activation of human cells. *J. Immun.* 167: 3555-3558, 2001.