

## Anti-Toll-like Receptor 4 TLR4 Antibody

Catalog Number: A00017

### About TLR4

Anti-Glycogen Synthase 1 pS641 antibody is validated by IHC, Western Blot and ELISA. Human muscle glycogen synthase (GS) is responsible for the biosynthesis of glycogen from phosphorylated glucose units. Mammalian liver and muscle contain GS consisting of four subunits with a total molecular weight of 360,000. GS is subject to regulation through both allosteric and covalent modification and occurs in two forms: the phosphorylated inactive form, and the dephosphorylated active form. GS is inactivated by the serine/threonine kinase called glycogen synthase kinase-3 $\beta$  that mainly functions to phosphorylate muscle glycogen synthase. This antibody is specific for the phosphorylated form of GS at S641. Phosphorylation of GS at S641 has been associated with Antiphospholipid Antibody Syndrome.

### Overview

Product Name	Anti-Toll-like Receptor 4 TLR4 Antibody
Reactive Species	Human, Mouse
Description	Boster Bio Anti-Toll-like Receptor 4 TLR4 Antibody catalog # A00017. Tested in IF, IHC applications. This antibody reacts with Human, Mouse.
Application	IF, IHC
Clonality	Polyclonal
Formulation	Liquid. In PBS containing 1mg/ml BSA and 0.1% sodium azide.
Storage Instructions	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.
Host	Goat
Uniprot ID	O00206

### Technical Details

Immunogen	Synthetic peptide corresponding to aa 161-192 (L <sup>161</sup> IQSFKLPEYFSNLTNLEHLDLSSNKIQSIYC <sup>192</sup> ) of the N-terminal domain of human TLR4 (Toll-like receptor 4).
Predicted Reactive Species	Bovine, Chicken
Isotype	IgG
Form	Liquid. In PBS containing 1mg/ml BSA and 0.1% sodium azide.
Concentration	0.5-1mg/ml, actual concentration vary by lot. Use suggested dilution ratio to decide dilution procedure.
Purification	Epitope-affinity purified IgG.

**Suggested Dilutions**

Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.

If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.

Some PubMed article(s) citing the expression level of this target are as follows:

Boster Bio's internal QC testing used:

Immunocytochemistry (acetone fixed cells, >1:400)

Immunohistochemistry (paraffin sections, >1:250)

Western Blot (>1:1,000)

Suggested dilutions/conditions may not be available for all applications.

Optimal conditions must be determined individually for each application.

## Anti-Toll-like Receptor 4 TLR4 Antibody (A00017) Images

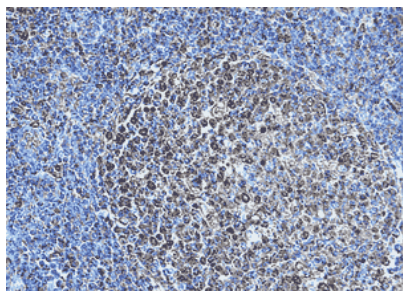


Figure 1. IHC analysis of TLR4 using anti-TLR4 antibody (A00017). TLR4 was detected in paraffin-embedded section. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-TLR4 Antibody (A00017) overnight at 4°C. Biotinylated goat anti Goat IgG antibody was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1023) with DAB as the chromogen.

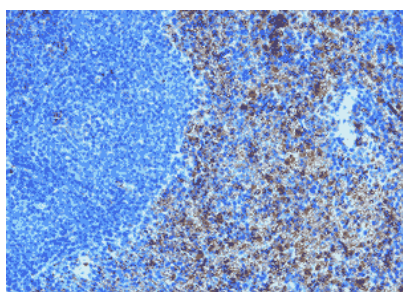


Figure 2. IHC analysis of TLR4 using anti-TLR4 antibody (A00017). TLR4 was detected in paraffin-embedded section. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-TLR4 Antibody (A00017) overnight at 4°C. Biotinylated goat anti Goat IgG antibody was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1023) with DAB as the chromogen.

## 12 Publications Citing This Product

1. PubMed ID: 10.3389/fvets.2020.00142, Pro-Inflammatory Response of Bovine Polymorphonuclear Cells Induced by Mycoplasma mycoides subsp. mycoides
2. PubMed ID: 31187839, Dong Y, Cheng H, Liu Y, Xue M, Liang H. Red yeast rice ameliorates high-fat diet-induced atherosclerosis in Apoe<sup>-/-</sup> mice in association with improved inflammation and altered gut microbiota composition. Food Funct. 2019 Jul 17;10(7):3880-3889. doi:10.1039/c9fo00583h. PMID:31187839.
3. PubMed ID: 34000276, Liu J, Zhang N, Zhang M, Yin H, Zhang X, Wang X, Wang X, Zhao Y. N-acetylserotonin alleviated the expression of interleukin-1beta in retinal ischemia-reperfusion rats via the TLR4/NF-kappaB/NLRP3 pathway. Exp Eye Res. 2021 May 14:108595. doi:10.1016/j.exer.2021.108595. Epub ahead of print. PMID:34000276.

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