

# Product Datasheet

## TLR4 Antibody - BSA Free NBP2-24538

Unit Size: 0.1 mg

Store at -20C. Avoid freeze-thaw cycles.

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**Publications: 7**

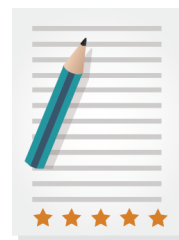
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**NBP2-24538**

TLR4 Antibody - BSA Free

| Product Information     |  |
|-------------------------|--|
| Unit Size               | 0.1 mg                                   |
| Concentration           | 1.0 mg/ml                                |
| Storage                 | Store at -20C. Avoid freeze-thaw cycles. |
| Clonality               | Polyclonal                               |
| Preservative            | 0.05% Sodium Azide                       |
| Isotype                 | IgG                                      |
| Purity                  | Immunogen affinity purified              |
| Buffer                  | PBS                                      |
| Target Molecular Weight | 95.7 kDa                                 |

| Product Description |  |
|---------------------|--|
| Host                | Rabbit   |
| Gene ID             | 7099   |
| Gene Symbol         | TLR4   |
| Species             | Human, Mouse, Bovine, Equine, Ferret, Primate, Rhesus Macaque                            |
| Reactivity Notes    | Ferret reactivity reported in scientific literature (PMID: 29791868).                    |
| Immunogen           | This TLR4 antibody was developed against a portion of amino acids 650-700 of human TLR4. |

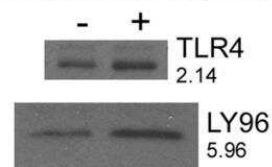
| Product Application Details |  |
|-----------------------------|--|
| Applications                | Western Blot, Immunohistochemistry, Immunohistochemistry-Paraffin                          |
| Recommended Dilutions       | Western Blot 0.1 - 0.5 ug/mL, Immunohistochemistry, Immunohistochemistry-Paraffin 10 ug/mL |



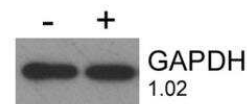
## Images

Western Blot: TLR4 Antibody [NBP2-24538] - Lanes containing cell lysate from untreated cell are on the left (-) and lysates from IFNG treated cells are on the right (+). The proteins are identified by the corresponding gene names. The housekeeping enzyme glyceraldehyde 3-phosphate dehydrogenase (GAPDH) was blotted as a control that is not altered by IFNG treatment. Except for GAPDH, the numbers under each gene name are the fold changes in mRNAs. Image collected and cropped by CiteAb from the following publication ([//doi.org/10.1371/journal.pone.0185956](https://doi.org/10.1371/journal.pone.0185956)) licensed under a CC-BY license.

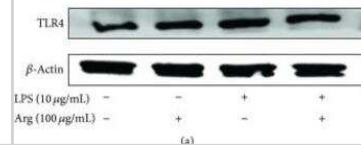
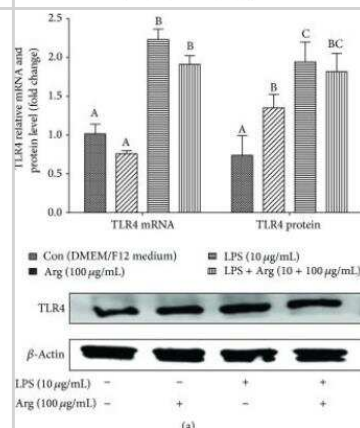
### Innate Immune Receptors



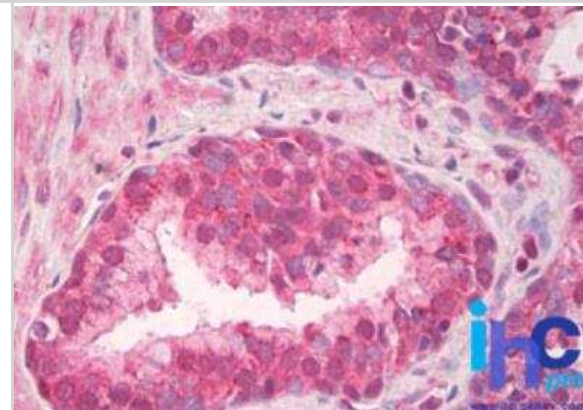
### Housekeeping Gene Control



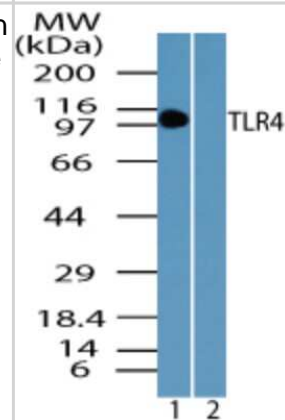
Western Blot: TLR4 Antibody [NBP2-24538] - The effect of Arg on LPS-induced TLR4, NF- $\kappa$ B mRNA, and protein expression in BMECs. Pure 2nd generation BMECs were starved for 16h and then cultured in DMEM/F12 medium containing 0 or 10ug/mL LPS and 0 or 100ug/mL Arg. After 12h, the mRNA levels of TLR4 and NF- $\kappa$ B were analyzed using qPCR. Protein expression was analyzed using western bolt.  $\beta$ -Actin was used as an internal reference. Data shown are mean  $\pm$  SEM of three independent experiments. Means with different letters (A, B, or C) are significantly different ( $P < 0.05$ ) from each other. Image collected and cropped by CiteAb from the following publication ([hindawi.com/journals/mi/2016/9618795/](https://hindawi.com/journals/mi/2016/9618795/)), licensed under a CC-BY license.



Immunohistochemistry-Paraffin: TLR4 Antibody [NBP2-24538] - Human prostate stained with TLR4 antibody at 10 ug/mL.



Western Blot: TLR4 Antibody [NBP2-24538] - Analysis of TLR4 in human intestine lysate in the 1) absence and 2) presence of immunizing peptide using TLR4 antibody at 0.1 ug/mL. Goat anti-rabbit Ig HRP secondary antibody and PicoTect ECL substrate solution were used for this test.



## Publications

Volk-Draper, L;Patel, R;Bhattarai, N;Yang, J;Wilber, A;DeNardo, D;Ran, S; Myeloid-Derived Lymphatic Endothelial Cell Progenitors Significantly Contribute to Lymphatic Metastasis in Clinical Breast Cancer *Am. J. Pathol.* 2019-08-14 [PMID: 31421071]

Snyder JM, Wood TR, Corry K et al. Ontogeny of white matter, toll-like receptor expression, and motor skills in the neonatal ferret *Int. J. Dev. Neurosci.* 2018-05-20 [PMID: 29791868] (Ferret)

Ellison MA, Gearheart CM, Porter CC, Ambruso DR. IFN-g alters the expression of diverse immunity related genes in a cell culture model designed to represent maturing neutrophils. *PLoS ONE.* 2017-10-05 [PMID: 28982143] (WB, Human)

Wu T, Wang C, Ding L et al. Arginine Relieves the Inflammatory Response and Enhances the Casein Expression in Bovine Mammary Epithelial Cells Induced by Lipopolysaccharide. *Mediators of Inflammation.* 2016-02-24 [PMID: 27110069] (WB, Bovine)

Torgersen Maria L, Engedal Nikolai, Pedersen Anne-Mari G et al. Toll-like receptor 4 facilitates binding of Shiga toxin to colon carcinoma and primary umbilical vein endothelial cells. *FEMS Immunol Med Microbiol.* 2011-02-01 [PMID: 21054580] (Human)

Park HJ, Hong JH, Kwon HJ et al. TLR4-mediated activation of mouse macrophages by Korean mistletoe lectin-C (KML-C). *Biochem Biophys Res Commun.* 2010-06-04 [PMID: 20450885] (WB, Mouse)

### Details:

The following antibodies were used: TLR4/CD284 (IMG-428E), TLR4/CD284 (IMG-577), and TLR4 (IMG-6307A). IMG-577 & IMG-6307A were used in Fig 1 (WB): Peritoneal primary mouse (BALB/C) macrophages stimulated with LPS and then treated with KML-C (Korean mistl

Wu Y, Lu J, Antony S et al. Activation of TLR4 is required for the synergistic induction of dual oxidase 2 and dual oxidase A2 by IFN-G and lipopolysaccharide in human pancreatic cancer cell lines *J Immunol J Immunol.* 2013-02-15 [PMID: 23296709] (WB, Human)

### Details:

Citation using the Azide Free format of this antibody.



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General: novus@novusbio.com

### **Products Related to NBP2-24538**

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|                  |   |
|------------------|---|
| NBP2-25295-1.0mg | LPS from E. Coli, TLR4 ligand                       |
| NBP2-26244       | TLR4 Inhibitor Peptide Set                          |
| HAF008           | Goat anti-Rabbit IgG Secondary Antibody [HRP]       |
| NB7160           | Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP] |
| NBP2-24891       | Rabbit IgG Isotype Control                          |

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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