


### Anti-TLR4 antibody [76B357.1] ab22048

★★★★★ [28 Abreviews](#) [261 References](#) [画像数 7](#)

#### 製品の概要

製品名	Anti-TLR4 antibody [76B357.1]
製品の詳細	Mouse monoclonal [76B357.1] to TLR4
由来種	Mouse
特異性	TLR4 expression levels and cleavage or degradation products can vary between different cell and tissue samples. Customers have observed this variability in WB band size and our laboratory has confirmed this variability as well observing lower molecular weight cleavage and degradation products and in some samples a lack of the full length TLR4 band. The TLR4 cleavage and degradation products and potential lack of full length TLR4 are well documented in the literature, including PMID 16885150 and 22927440. We recommend running a positive control human intestine tissue lysate.
アプリケーション	<b>適用あり:</b> Flow Cyt (Intra), ICC/IF, IHC-P, ICC, IHC-Fr, ELISA
種交差性	<b>交差種:</b> Mouse, Rat, Human, Pig <b>交差が予測される動物種:</b> Sheep, Horse, Cow, Cat, Chimpanzee 
免疫原	Synthetic peptide corresponding to Human TLR4 aa 100-200 conjugated to Keyhole Limpet Haemocyanin (KLH). Database link: <a href="#">O00206</a>
ポジティブ・コントロール	Human, Mouse and Rat small intestine for Western Blot or THP1 cells for FACS analysis. Flow Cyt (Intra): Jurkat cells.
特記事項	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.

バッファー	pH: 7.40 Preservative: 0.05% Sodium azide Constituents: 99% PBS, 0.05% BSA
精製度	Protein G purified
ポリ/モノ	モノクローナル
クローン名	76B357.1
アイソタイプ	IgG2b
軽鎖の種類	kappa

## アプリケーション

**The Abpromise guarantee**      **Abpromise保証は、次のテスト済みアプリケーションにおけるab22048の使用に適用されます**  
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		Use 1µg for 10 <sup>6</sup> cells. Methanol or paraformaldehyde fixed cells. <b>ab170192</b> - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody.
ICC/IF	★★★★★ (5)	Use at an assay dependent concentration.
IHC-P	★★★★★ (5)	Use at an assay dependent concentration.
ICC	★★★★☆ (3)	Use at an assay dependent concentration.
IHC-Fr	★★★★★ (2)	Use at an assay dependent concentration.
ELISA		Use at an assay dependent concentration. PubMed: 24952384

## ターゲット情報

機能	Cooperates with LY96 and CD14 to mediate the innate immune response to bacterial lipopolysaccharide (LPS). Acts via MYD88, TIRAP and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response. Also involved in LPS-independent inflammatory responses triggered by Ni(2+). These responses require non-conserved histidines and are, therefore, species-specific.
組織特異性	Highly expressed in placenta, spleen and peripheral blood leukocytes. Detected in monocytes, macrophages, dendritic cells and several types of T-cells.
関連疾患	Genetic variation in TLR4 is associated with age-related macular degeneration type 10 (ARMD10) [MIM:611488]. ARMD is a multifactorial eye disease and the most common cause of irreversible vision loss in the developed world. In most patients, the disease is manifest as ophthalmoscopically visible yellowish accumulations of protein and lipid that lie beneath the retinal pigment epithelium and within an elastin-containing structure known as Bruch membrane.
配列類似性	Belongs to the Toll-like receptor family. Contains 18 LRR (leucine-rich) repeats.

Contains 1 LRRCT domain.

Contains 1 TIR domain.

## ドメイン

The TIR domain mediates interaction with NOX4.

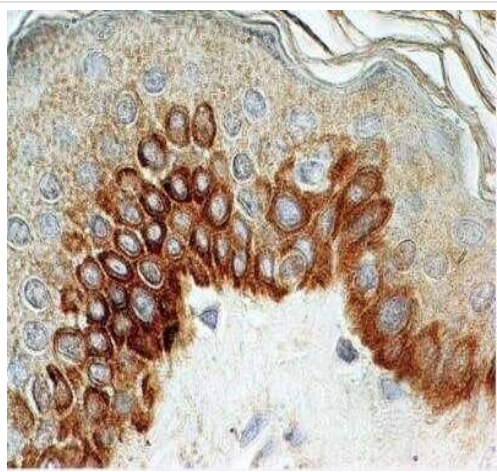
## 翻訳後修飾

N-glycosylated. Glycosylation of Asn-526 and Asn-575 seems to be necessary for the expression of TLR4 on the cell surface and the LPS-response. Likewise, mutants lacking two or more of the other N-glycosylation sites were deficient in interaction with LPS.

## 細胞内局在

Membrane.

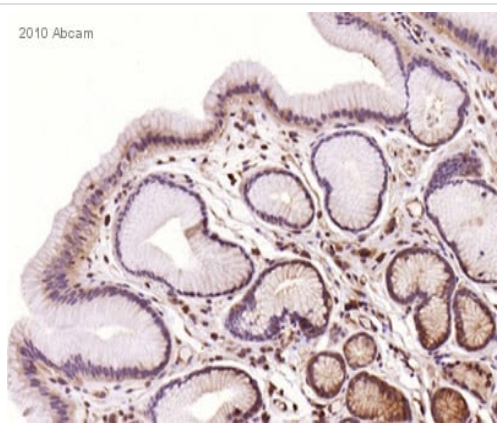
## 画像



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TLR4 antibody  
[76B357.1] (ab22048)

Immunohistochemical analysis of paraffin-embedded Human skin tissue labeling TLR4 with ab22048 at 5 ug/ml. The section was blocked using blocking solution (1% BSA in PBS) for 1 hour at room temperature and incubated with ab22048 overnight at 4°C after removing blocking solution.

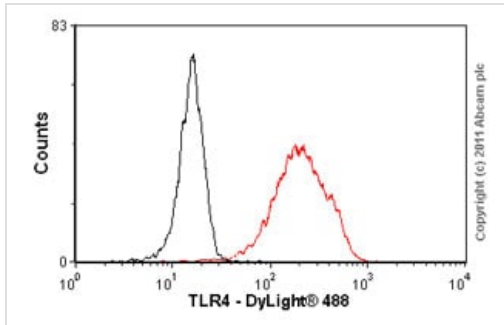
Antigen retrieval: Bring slides to a boil in 10 mM sodium citrate buffer (pH 6.0) then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench-top for 30 minutes (keep slides in the sodium citrate buffer all the time).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TLR4 antibody  
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This image is courtesy of an anonymous Abreview

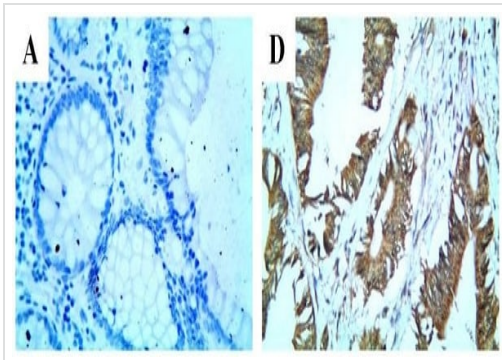
ab22048 staining TLR4 in Human stomach tissue sections by Immunohistochemistry (IHC-P - formaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 5% serum for 1 hour; antigen retrieval was by heat mediation in citrate buffer (10mM, pH 6) ([ab64236](#)). Samples were incubated with primary antibody (1/100) for 1 hour at 23°C. An undiluted HRP-conjugated goat anti-mouse IgG polyclonal was used as the secondary antibody.



Flow Cytometry (Intracellular) - Anti-TLR4 antibody  
[76B357.1] (ab22048)

Overlay histogram showing Jurkat cells (**ab7899**) stained with ab22048 (red line). The cells were fixed with methanol (5 min) and incubated in 1x PBS / 10% normal goat serum (**ab7481**) / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab22048, 1µg/1x10<sup>6</sup> cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2b [PLPV219] (**ab91366**, 2µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in Jurkat cells fixed with 4% paraformaldehyde (10 min) used under the same conditions.

Please note that Abcam do not have data for use of this antibody on non-fixed cells. We welcome any customer feedback.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TLR4 antibody  
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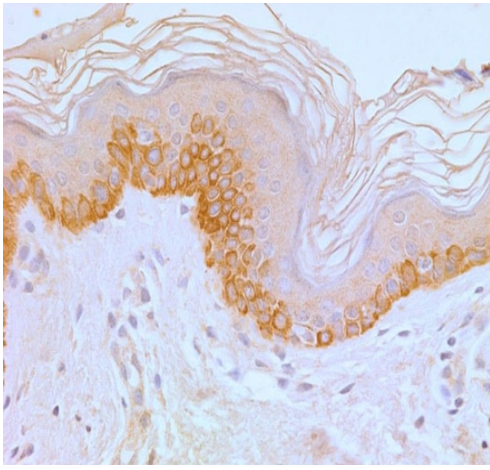
Xu H. et al PLoS One. 2011;6(12):e27399. doi: 10.1371/journal.pone.0027399. Epub 2011 Dec 13  
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#### Representative examples of immunohistochemical staining of TLR4 in colorectal carcinoma tissues (original magnification 100×).

Paraffin-embedded human normal colorectal tissue (A) and colorectal carcinoma tissue (D) stained for TLR4 with ab22048 in immunohistochemical analysis. Counter stained with hematoxylin.

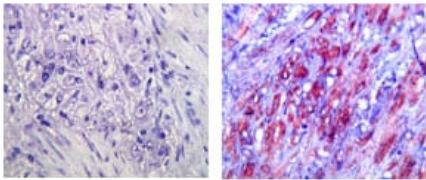
No staining is observed in normal colorectal tissue (A).

(From Figure 4A and 4D of Xu et al)



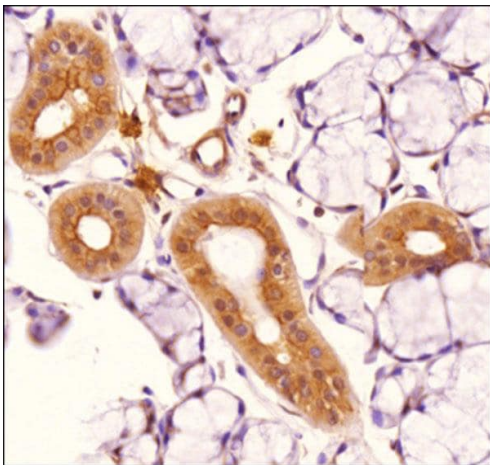
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TLR4 antibody  
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ab22048 (5 ug/ml) staining TLR4 in Human skin tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Membrane-cytoplasmic immunopositivity of TLR4 was primarily observed in the pigmented basal cells and the adjacent keratinocytes in the epidermal layer.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TLR4 antibody  
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ab22048 at 5 µg/ml staining TLR4 in Human colon tissue sections by Immunohistochemistry (Formalin/ PFA-fixed paraffin-embedded tissue sections). Left hand image shows staining with an isotype control antibody whilst right one shows staining with ab22048.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TLR4 antibody  
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ab22048 staining TLR4 in Rat's salivary gland tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). ab22048 at a dilution of 1:100 generated a membrane-cytoplasmic staining in the tissue with stronger signal in ductal epithelial cells.

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