

Monoclonal anti-human TLR7 antibody (clone 4F4)

Mouse IgG₁, κ

Cat. No. IBATR0601

Immunogen: Recombinant human TLR7 (451-500aa) purified from *E. coli*

NCBI Accession No.: NP_057646

Isotype: Mouse IgG₁ heavy chain and κ light chain

Clone: Anti-human TLR7 mAb, clone 4F4, is derived from hybridization of mouse SP2/O myeloma cells with spleen cells from BALB/c mice immunized with a recombinant human TLR7 protein.

Description: TLR7 is one of toll-like receptors which are type I transmembrane proteins involved in innate immunity by recognizing microbial conserved structures. These proteins are characterized by multiple copies of leucine rich repeats in the extracellular domain and IL-1 receptor motif in the cytoplasmic domain, and act through adaptor molecules such as MyD88 and TIRAP to activate various kinases and transcription factors. Human TLR7(hTLR7) is predominantly expressed in lung, placenta and spleen and hTLR7,8 genes are located on the sex chromosome X. hTLR7 may play an important role in detecting and combating viral infections.

Concentration: 1 mg/ml

Form: Liquid. In Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% Glycerol

Storage: Can be stored at +4°C. For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

Usage: The antibody has been tested by ELISA, Western blot analysis, ICC/IF and Flow cytometry to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

Application: ELISA, WB, ICC/IF, Flow cyt

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.



Manufactured for:

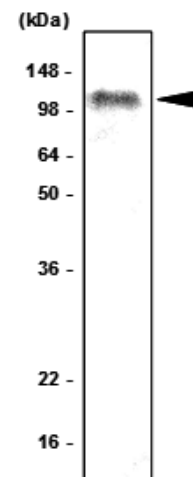
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Product information

Western blot analysis

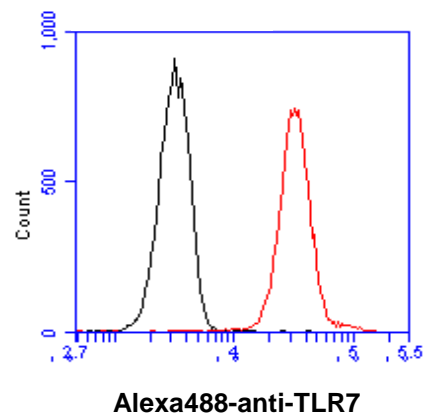
The Ramos cell lysates (80ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human TLR7 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

Arrow indicates TLR7 protein in human Ramos cells.



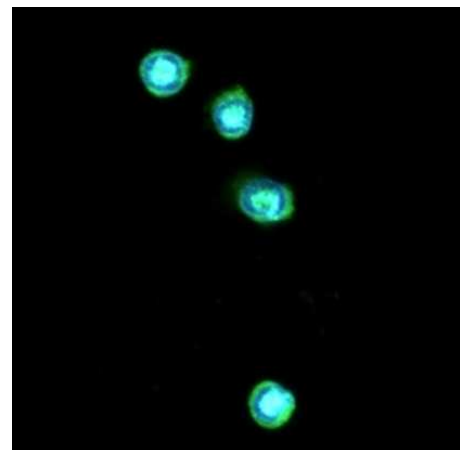
Flow cytometry

Flow cytometry analysis of TLR7 in THP-1 cell line, staining at 2-5ug for 1×10^6 cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).



ICC/IF analysis

ICC/IF analysis of TLR7 in THP-1 cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human TLR7 antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).



General references:

- Lee J., *et al.* (2003) *Proc. Natl. Acad. Sci. USA.* 100, 6646-6651
 Crozat K., *et al.* (2004) *Proc. Natl. Acad. Sci. USA.* 101, 6835-6836
 Muzio M., *et al.* (1998) *J. Exp. Med.* 187, 2097-2101
 Horng T., *et al.* (2002) *Nature* 420, 329-333

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