

# Human TLR7 antibody

Catalog Number: ATR0601

## PRODUCT INFORMATION

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**Catalog number**

ATR0601

**Clone No.**

4F4

**Product type**

Monoclonal Antibody

**UnitProt No.**

Q9NYK1

**NCBI Accession No.**

NP\_057646

**Alternative Names**

toll-like receptor 7, PRO285, UNQ248, tlr 7

## PRODUCT SPECIFICATION

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**Antibody Host**

Mouse

**Reacts With**

Human

**Concentration**

1mg/ml (determined by BCA assay)

**Formulation**

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

**Immunogen**

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

**Isotype**

IgG1 kappa

**Purification Note**

By protein-G affinity chromatography

**Application**

ELISA, ICC/IF, FACS

**Usage**

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

**Storage**

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Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

### Description

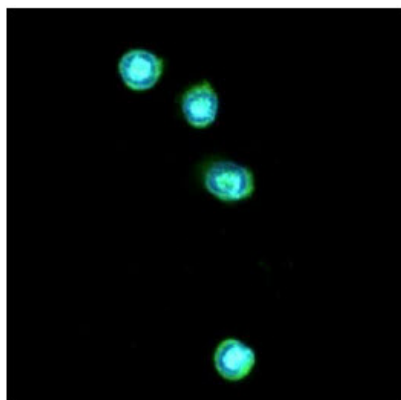
TLR7 is one of toll-like receptors which are type I transmembrane proteins involved in innate immunity by recognizing microbial conserved structures. These proteins are characterized by multiple copies of leucine rich repeats in the extracellular domain and IL-1 receptor motif in the cytoplasmic domain, 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.

### 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.
- Hornig T., et al. (2002) Nature 420, 329-333.

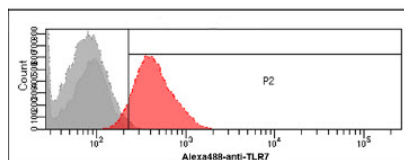
## DATA

### Immunocytochemistry/Immunofluorescence (ICC/IF)



ICC/IF analysis of TLR7 in THP-1 cells. The cell was stained with ATR0601 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

### Flow cytometry (FACS)



Flow cytometry analysis of TLR7 in THP-1 cells. The cell was stained with ATR0601 at 2-5ug for  $1 \times 10^6$  cells (red). A Goat anti mouse IgG (Alexa fluor 488) was used as the secondary antibody. Mouse monoclonal IgG was used as the isotype control (dark gray), cells without incubation with primary and secondary antibody was used as the negative control (light gray).