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# Product Data Sheet

# APC anti-mouse CD283 (TLR3)

**Catalog # / Size:** 141905 / 25 µg
141906 / 100 µg

**Clone:** 11F8

**Isotype:** Rat IgG2a

**Immunogen:** Recombinant mouse TLR3 extracellular domain.

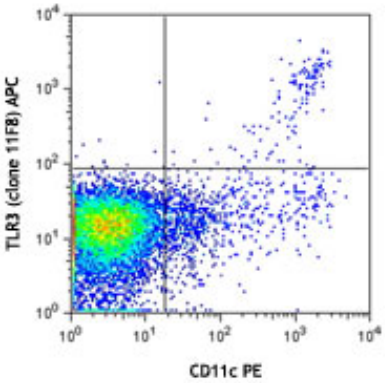
**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions. The solution is free of unconjugated APC and unconjugated antibody.

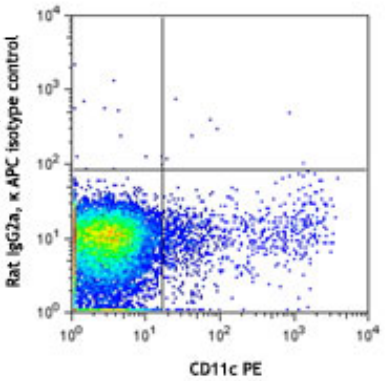
**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.2 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**




*C57BL/6 mouse splenocytes were surface stained with CD4/CD19/Ly-6G/NK1.1 PerCP, CD11c PE and CD8 FITC, followed by intracellular staining with TLR3 (clone 11F8) APC (top) or rat IgG2a, κ APC isotype control (bottom). The data was analyzed by gating on CD4/CD19/Ly-6G/NK1.1 negative and CD8 positive cells.*




# Applications:

**Applications:** FC - *Quality tested*

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤0.5 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Additional reported application (for the relevant formats) include: immunohistochemical staining of frozen or formalin embedded tissue[1].

**Application References:**
1. McCartney S, *et al.* 2009. *J. Exp. Med.* 13:2967. (IHC)

**Description:** Toll-like receptor 3 (TLR3), also known as CD283, is type I transmembrane protein that belongs to the TLR family. It forms a large horseshoe shape that contacts a neighboring horseshoe, forming a dimer of two horseshoes. It is characterized by an extracellular domain with leucine-rich repeats and a cytoplasmic domain with homology to the type I IL-1 receptor. TLR3 is expressed selectively on the cytoplasmic membrane and intracellularly in dendritic cells. It is also highly expressed in the placenta, pancreas, heart, liver, lung, and muscle. TLR3 is a pattern recognition receptor that participates in innate immune response to microbial pathogens by recognizing polyinosine-polycytidylic acid (Poly(I:C)) and dsRNA. Ligand binding by TLR3 induces receptor dimerization which results in inducing NF-κ B activation (via TRIF-linked RIP1/TLR3 interactions) and cytokine production. TLR3 has been shown to interact with a number of proteins including MYD88, TRAF6, TRIAD3, MAP3K7, and TAB2.

**Antigen References:**
1. Alexopoulou L, *et al.* 2001. *Nature* 413:732.
2. Doyle SE, *et al.* 2002. *Immunity* 17:251.
3. Meylan E, *et al.* 2004. *Nat Immunol.* 5:503.
4. Muzio M, *et al.* 2000. *J. Immunol.* 164:5998.
5. Rock FL, *et al.* 1998. *P. Natl. Acad. Sci. USA* 95:588.

**Related Products:**

| Product | Clone | Application |
|---|---|---|
| APC Rat IgG2a, κ Isotype Ctrl | RTK2758 | FC, ICFC |
| Cell Staining Buffer | | FC, ICC, ICFC |
| RBC Lysis Buffer (10X) | | FC, ICFC |
| TruStain fcX™ (anti-mouse CD16/32) | 93 | FC |

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