

**SIGIRR Antibody**  
**Catalog # ASC10260****Specification**

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**SIGIRR Antibody - Product Information**

Application	WB, ICC
Primary Accession	<a href="#">Q6IA17</a>
Other Accession	<a href="#">CAG33619</a> , <a href="#">48146793</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	SIGIRR antibody can be used for the detection of SIGIRR by Western blot at 0.5 to 2 µg/mL. Antibody can also be used for immunocytochemistry starting at 10 µg/mL.

**SIGIRR Antibody - Additional Information**Gene ID **59307****Other Names**

SIGIRR Antibody: TIR8, Single Ig IL-1-related receptor, Single Ig IL-1R-related molecule, TIR8, single immunoglobulin and toll-interleukin 1 receptor (TIR) domain

**Target/Specificity**

SIGIRR;

**Reconstitution & Storage**

SIGIRR antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

**Precautions**

SIGIRR Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**SIGIRR Antibody - Protein Information****Name** SIGIRR**Function**

Acts as a negative regulator of the Toll-like and IL-1R receptor signaling pathways. Attenuates the recruitment of receptor- proximal signaling components to the TLR4 receptor, probably through an TIR-TIR domain interaction with TLR4. Through its extracellular domain interferes with the heterodimerization of IL1R1 and IL1RAP.

**Cellular Location**

Membrane; Single-pass type III membrane protein

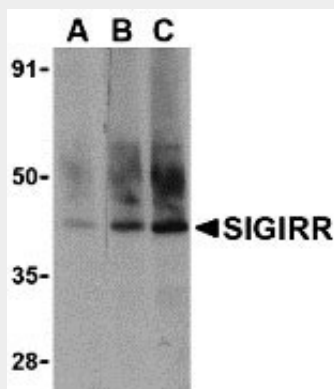
**Tissue Location**

Mainly expressed in epithelial tissues such as kidney, lung and gut.

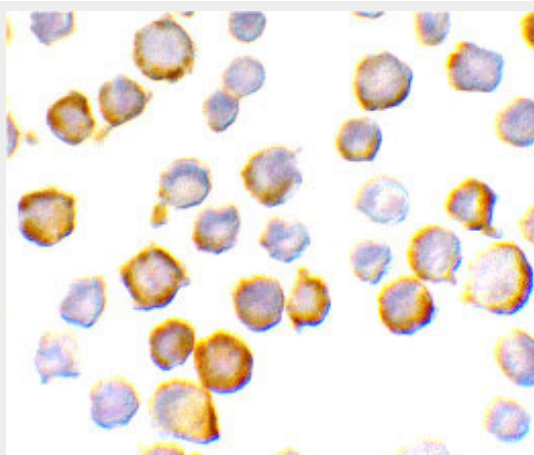
**SIGIRR Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**SIGIRR Antibody - Images**

Western blot analysis of SIGIRR in A549 cell lysate with SIGIRR antibody at (A) 0.5, (B) 1, and (C) 2 µg/mL.



Immunocytochemistry of SIGIRR in A549 cells with SIGIRR antibody at 10 µg/mL.

**SIGIRR Antibody - Background**

**SIGIRR Antibody:** SIGIRR is a member of the Toll-like receptor-interleukin 1 receptor superfamily. Members of this family are defined by the presence of an intracellular Toll-IL-1R (TIR) domain. The

Toll-like receptors (TLRs) are signaling molecules that recognize different microbial products during infection and serve as an important link between the innate and adaptive immune responses. SIGIRR was originally identified through database analysis and was shown to have only one Ig domain as opposed to the normal three Ig folds seen in the TIR family. Similar to ST2, another TIR family member, it has been shown to negatively regulate IL-1 receptor and Toll-like receptor signaling. However, SIGIRR inhibits TLR-IL-1R signaling by dimerizing with TLR4, TLR5, TLR9, and IL-1R. It also associates with the down-stream TLR signaling proteins IRAK and TRAF6 in an IL-1-dependent fashion.

#### **SIGIRR Antibody - References**

Takeda K, Kaisho T, and Akira S. Toll-like receptors. Annu. Rev. Immunol. 2003; 21:335-76.

Janeway CA Jr. and Medzhitov R. Innate immune recognition. Annu. Rev. Immunol. 2002; 20:197-216.

Thomassen E, Renshaw BR, and Sims JE. Identification and characterization of SIGIRR, a molecule representing a novel subtype of the IL-1R superfamily. Cytokine 1999; 11:389-99.

Wald D, Qin J, Zhao Z, et al. SIGIRR, a negative regulator of Toll-like receptor-interleukin 1 receptor signaling. Nat. Immunol. 2003; 4:920-7.