

SIGIRR Antibody

Catalog # ASC10260

Product Information

Application	WB, ICC, E
Primary Accession	Q6IA17
Other Accession	CAG33619 , 48146793
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	45679
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	SIGIRR antibody can be used for the detection of SIGIRR by Western blot at 0.5 to 2 μ g/mL. Antibody can also be used for immunocytochemistry starting at 10 μ g/mL.

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.

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.

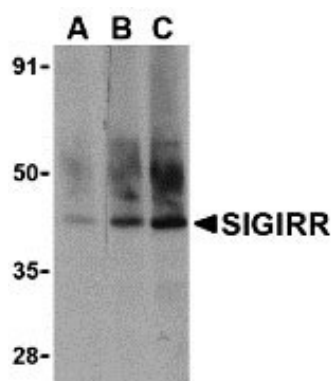
Background

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.

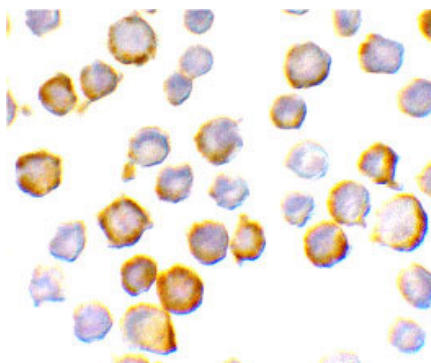
References

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.

Images



Western blot analysis of SIGIRR in A549 cell lysate with SIGIRR antibody at (A) 0.5, (B) 1, and (C) 2 $\mu\text{g/mL}$.



Immunocytochemistry of SIGIRR in A549 cells with SIGIRR antibody at 10 $\mu\text{g/mL}$.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.