



## Mouse Anti-Rat IL1R1 monoclonal antibody, clone NN21 (CABT-ZB567)

This product is for research use only and is not intended for diagnostic use.

### PRODUCT INFORMATION

<b>Specificity</b>	It reacts with Rat IL1R1
<b>Target</b>	IL1R1
<b>Immunogen</b>	Recombinant Rat IL1R1/IL-1R1/IL-1 RI Protein
<b>Isotype</b>	IgG
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Rat
<b>Clone</b>	NN21
<b>Purification</b>	Protein A purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	ELISA(cap) We recommend the following for sandwich ELISA (Capture - Detection): CABT-ZB567 - CABT-ZB923 This antibody will detect IL1R1 in antibody pair set. [ABPR-ZB144]
<b>Preparation</b>	This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Rat IL1R1 / IL-1R1 / IL-1 RI. The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
<b>Format</b>	Purified, Liquid
<b>Concentration</b>	Lot specific

<b>Size</b>	50 $\mu$ L, 100 $\mu$ L, 200 $\mu$ L, 1 mL
<b>Buffer</b>	PBS
<b>Preservative</b>	None
<b>Storage</b>	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
<b>Ship</b>	Wet ice

## BACKGROUND

<b>Introduction</b>	Interleukin 1 receptor, type I (IL-1R1) also known as CD121a (Cluster of Differentiation 121a), is an interleukin receptor. IL-1R1/CD121a is a cytokine receptor that belongs to the interleukin 1 receptor family. This protein is a receptor for interleukin alpha (IL1A), interleukin beta (IL1B), and interleukin 1 receptor, type I (IL1R1/IL1RA). IL-1R1/CD121a is an important mediator involved in many cytokines induced immune and inflammatory responses. This protein has been characterized by pharmacological and molecular techniques in the mouse brain. The spindle-shaped astrocytes enclose the wound, separating the healthy from damaged neural tissue. The shape change and subsequent repair processes are IL-1 $\beta$ activity-dependent, acting through the IL-1 type 1 receptor (IL-1R1), as co-application of the IL-1type 1 receptor antagonist protein (IL-1ra) blocks IL-1 $\beta$ induced effects. In the spleen, a slight increase in IL-1R ACP and IL-1R1 was observed during the first hours following LPS stimulation. In conclusion, IL-1R AcP mRNA is expressed in the brain and in other tissues where IL-1R1/CD121a transcripts are found. However, the regulation of its expression is distinct from IL-1R1/CD121a. The high level of expression and the lack of regulation of IL-1R AcP transcripts in the brain under inflammatory conditions suggest that the protein might be constitutively expressed in excess.
<b>Keywords</b>	IL1R1; interleukin 1 receptor, type I; P80; IL1R

## GENE INFORMATION

<b>Synonyms</b>	IL1R1; interleukin 1 receptor, type I; P80; IL1R; IL1RA; CD121A; D2S1473; IL-1R-alpha; interleukin-1 receptor type 1; IL-1R-1; IL-1RT1; IL-1RT-1; interleukin-1 receptor alpha; interleukin-1 receptor type I; CD121 antigen-like family member A; interleukin 1 receptor alpha, type I
<b>Entrez Gene ID</b>	<a href="#">25663</a>
<b>UniProt ID</b>	<a href="#">P13504</a>