

## Recombinant IRAK1 Monoclonal Antibody

catalog number: **AN301855L**

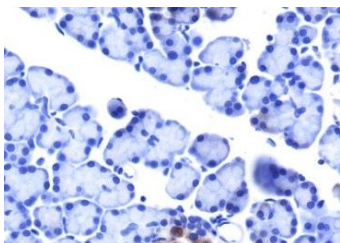
**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Description

<b>Reactivity</b>	Human;Rat;Mouse
<b>Immunogen</b>	Recombinant human IRAK1 fragment
<b>Host</b>	Rabbit
<b>Isotype</b>	IgG, $\kappa$
<b>Clone</b>	A567
<b>Purification</b>	Protein A purified
<b>Buffer</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05% protein protectant.

### Applications Recommended Dilution

<b>WB</b>	1:200-1:1000
<b>IHC</b>	1:100-1:1000



Immunohistochemistry of paraffin-embedded Rat pancreas  
using IRAK1 Monoclonal Antibody at dilution of 1:100.

### Preparation & Storage

<b>Storage</b>	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
<b>Shipping</b>	Ice bag

### Background

IRAK1 is the first member of the death domain containing protein kinase family that play a key role in initiating innate immune response against foreign pathogens. They are involved in Toll-like receptor (TLR) and interleukin-1 receptor (IL-1R) signaling pathways. Upon ligand binding to TLR/IL-1R, IRAK1 is recruited by MYD88 to the receptor-signaling complex, the association leads to IRAK1 phosphorylation by IRAK4 and subsequent autophosphorylation and kinase activation. Hyper-phosphorylated IRAK1 then disengages from the receptor complex, and forms a cytosolic IRAK1-TRAF6 complex. TRAF6 then interacts with TAK and TAB, resulting in eventual activation of the NF- $\kappa$ B and MAPK pathways. Phosphorylated IRAK1 also undergoes ubiquitin-mediated degradation or sumoylation, which results in nuclear translocation and transcriptional activation of inflammatory target genes.

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