

## Product datasheet for **AP20311PU-N**

### IRAK (IRAK1) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500-1/1000. <b>Immunohistochemistry on paraffin sections:</b> 1/50-1/200.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of IRAK1 protein.
Formulation:	Phosphate buffered saline (PBS) with 0.05% sodium azide, approx. pH 7.2 State: Aff - Purified State: Liquid purified Ig fraction
Concentration:	1.0 mg/ml
Purification:	Affinity-chromatography using epitope-specific immunogen; purity is > 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 76 kDa
Gene Name:	interleukin 1 receptor associated kinase 1
Database Link:	<a href="#">Entrez Gene 3654 Human P51617</a>



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**Background:**

Three structurally related ligands for IL-1Rs have been described. These include two agonists, IL-1 $\alpha$  and IL-1 $\beta$ , and a specific receptor antagonist, IL-1 $\alpha$ . Two distinct receptors designated IL-1RI and IL-1RII have been identified, each of which belong to the Ig superfamily. The preponderance of evidence suggests IL-1RI to be the functional IL-1 receptor. Binding of IL-1 to its cognate receptor results in the activation of the NF $\kappa$ B signaling pathway. The IL-1-dependent kinase termed IRAK (for IL-1 receptor-associated kinase) co-immunoprecipitates with activated IL-1RI and has been implicated as an upstream mediator of NF $\kappa$ B activation. Additional support for this assertion comes from the fact that a related *Drosophila* protein, Pelle, is a known upstream activator of Dorsal, the *Drosophila* homolog of NF $\kappa$ B.

**Synonyms:**

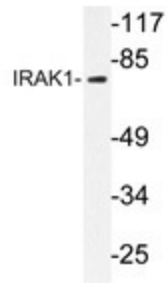
IRAK-1, IRAK

**Protein Families:**

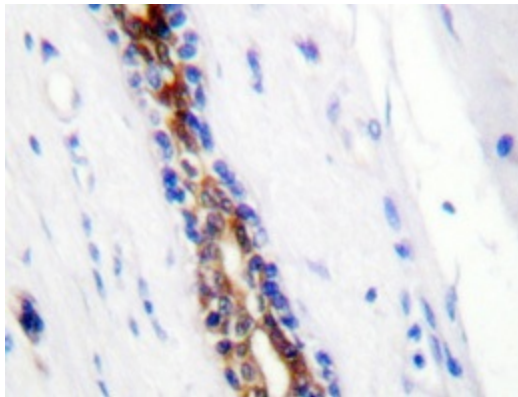
Druggable Genome, Protein Kinase, Transcription Factors

**Protein Pathways:**

Apoptosis, Neurotrophin signaling pathway, Toll-like receptor signaling pathway

**Product images:**

Western blot analysis of IRAK1 antibody (Cat.-No.: AP20311PU-N) in extracts from NIH/3T3 cells.



Immunohistochemistry analyzes of IRAK1 antibody (Cat.-No.: AP20311PU-N) in paraffin-embedded human breast carcinoma tissue.