Anti-IRAK4 Antibody [B9-H2]

EM1709-86

Product Type:	Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human, Mouse, Monkey
Applications:	WB, IHC-P, FC
Molecular Wt:	52 kDa
Clone number:	B9-H2

Description: Interleukin-1 receptor (IL1R)-associated kinases (IRAKs) are important mediators in the signal transduction of Toll-like receptor (TLR) and IL1R family members, collectively referred to as TIRs. IRAK family members include two active kinases, IRAK-1 and IRAK-4, and two inactive kinases, IRAK-2 and IRAK-M. Binding of IL-1 to its cognate receptor results in the activation of the NFkB signaling pathway and MAP kinase pathways. IRAK-4 appears to act upstream of other IRAKs and phosphorylates IRAK-1 on threonine 387. It is highly expressed in liver and kidney tissues, but also displays a wide, low level of expression in other tissues. IRAK-4 is an essential component of innate immunity. Deficiency of IRAK-4 leads to recurrent bacterial infections and profound hyporesponsiveness to LPS and IL-1. Therefore, IRAK-4 may be a potential target for therapeutic drug design.

Immunogen: Recombinant protein

Positive control: Human IRAK4 recombinant protein, THP-1, Hela, K562, MCF-7, RAW264.7, Jurkat, Cos7, human lung cancer tissue, human kidney cancer tissue.

Subcellular location: Cytoplasm.

Database links: SwissProt: Q9NWZ3 Human | Q8R4K2 Mouse

Recommended Dilutions:

WB	1:500-1:1,000
IHC-P	1:50-1:200
FC	1:100-1:200

Storage Buffer: Purified antibody in PBS with 0.05% sodium azide.

Storage Instruction: 4℃; -20℃ for long term storage.

Purity: Protein A affinity purified.

Images

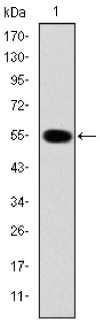

Fig1: Western blot analysis of IRAK4 on human IRAK4 recombinant protein using anti-IRAK4 antibody at 1/1,000 dilution.

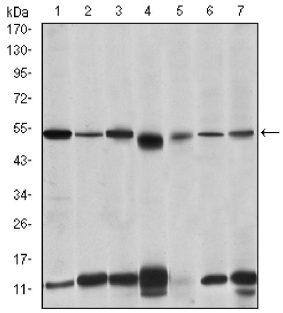

Fig2: Western blot analysis of IRAK4 on different cell lysates using anti-IRAK4 antibody at 1/1,000 dilution.
Positive control:
Lane 1: THP-1
Lane 2: Hela
Lane 3: K562
Lane 4: MCF-7
Lane 5: RAW264.7
Lane 6: Jurkat
Lane 7: Cos7

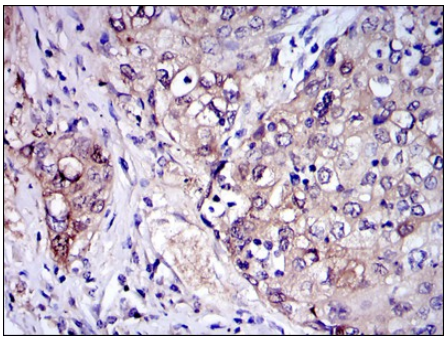

Fig3: Immunohistochemical analysis of paraffin-embedded human lung cancer tissue using anti-IRAK4 antibody. Counter stained with hematoxylin.

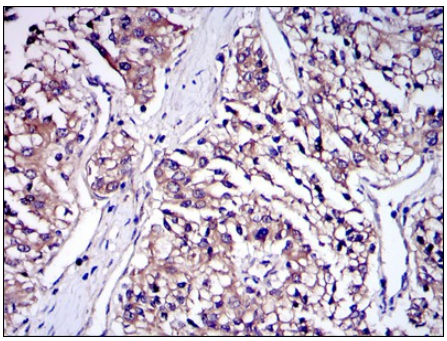

Fig4: Immunohistochemical analysis of paraffin-embedded human kidney cancer tissue using anti-IRAK4 antibody. Counter stained with hematoxylin.

Background References

1. Wu Y et al. Nobiletin ameliorates ischemia-reperfusion injury by suppressing the function of Kupffer cells after liver transplantation in rats. Biomed Pharmacother. 89:732-741 (2017).
2. Dunne A et al. IRAK1 and IRAK4 promote phosphorylation, ubiquitination, and degradation of MyD88 adaptor-like (Mal). J Biol Chem 285(24):18276-82 (2010).