

Datasheet for ABIN753538
anti-IRAK4 antibody (pThr345)

3 Images

[Go to Product page](#)

Overview

| | |
|----------------------|---|
| Quantity: | 100 µL |
| Target: | IRAK4 |
| Binding Specificity: | pThr345 |
| Reactivity: | Human, Mouse, Rat, Cow, Pig, Dog |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Conjugate: | This IRAK4 antibody is un-conjugated |
| Application: | Western Blotting (WB), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)) |

Product Details

| | |
|-------------------|--|
| Immunogen: | KLH conjugated synthetic phosphopeptide derived from human IRAK4 around the phosphorylation site of Thr345 |
| Isotype: | IgG |
| Cross-Reactivity: | Human, Mouse, Rat |
| Purification: | Purified by Protein A. |

Target Details

| | |
|-------------------|--|
| Target: | IRAK4 |
| Alternative Name: | IRAK4 (IRAK4 Products) |

Target Details

| | |
|-------------------|---|
| Background: | <p>Synonyms: IPD1, REN64, IRAK-4, NY-REN-64, Interleukin-1 receptor-associated kinase 4, Renal carcinoma antigen NY-REN-64, IRAK4</p> <p>Background: Serine/threonine-protein kinase that plays a critical role in initiating innate immune response against foreign pathogens. Involved in Toll-like receptor (TLR) and IL-1R signaling pathways. Is rapidly recruited by MYD88 to the receptor-signaling complex upon TLR activation to form the Myddosome together with IRAK2. Phosphorylates initially IRAK1, thus stimulating the kinase activity and intensive autophosphorylation of IRAK1. Phosphorylates E3 ubiquitin ligases Pellino proteins (PELI1, PELI2 and PELI3) to promote pellino-mediated polyubiquitination of IRAK1. Then, the ubiquitin-binding domain of IKBKG/NEMO binds to polyubiquitinated IRAK1 bringing together the IRAK1-MAP3K7/TAK1-TRAF6 complex and the NEMO-IKKA-IKKB complex. In turn, MAP3K7/TAK1 activates IKKs (CHUK/IKKA and IKBKB/IKKB) leading to NF-kappa-B nuclear translocation and activation. Alternatively, phosphorylates TIRAP to promote its ubiquitination and subsequent degradation. Phosphorylates NCF1 and regulates NADPH oxidase activation after LPS stimulation suggesting a similar mechanism during microbial infections.</p> |
| Molecular Weight: | 51kDa |
| Gene ID: | 51135 |
| UniProt: | Q9NWZ3 |
| Pathways: | NF-kappaB Signaling , TLR Signaling , Activation of Innate immune Response , Toll-Like Receptors Cascades |

Application Details

| | |
|--------------------|--|
| Application Notes: | <p>WB(1:100-500)</p> <p>Optimal working dilution should be determined by the investigator.</p> |
| Restrictions: | For Research Use only |

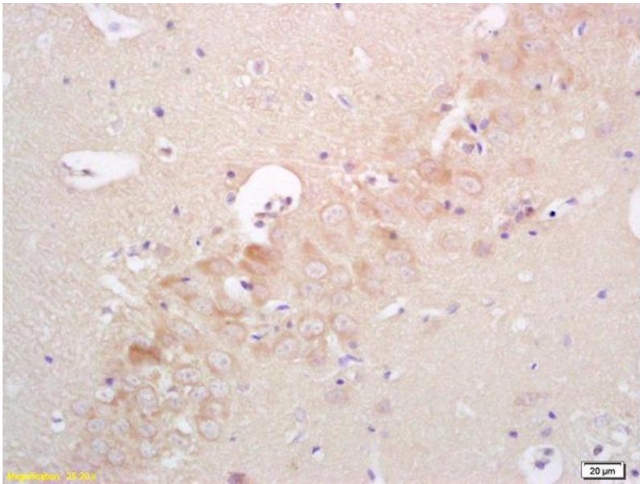
Handling

| | |
|--------------------|--|
| Format: | Liquid |
| Concentration: | 1 µg/µL |
| Buffer: | Aqueous buffered solution containing 1 % BSA, 50 % glycerol and 0.09 % sodium azide. |
| Preservative: | Sodium azide |
| Precaution of Use: | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which |

Handling

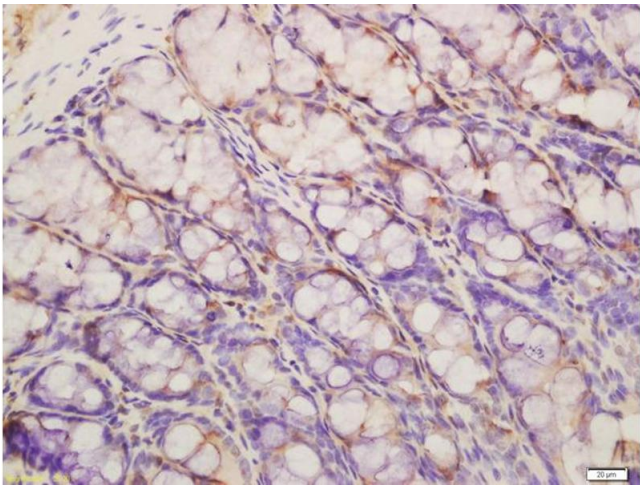
| | |
|------------------|--|
| | should be handled by trained staff only. |
| Storage: | -20 °C |
| Storage Comment: | Store at -20°C for 12 months. |
| Expiry Date: | 12 months |

Images



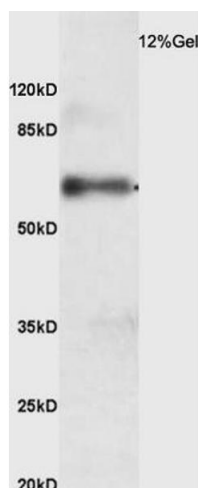
Immunohistochemistry

Image 1. Formalin-fixed and paraffin embedded rat brain labeled with Rabbit Anti phospho-IRAK4(Thr345)Polyclonal Antibody, Unconjugated (ABIN753538) at 1:200 followed by conjugation to the secondary antibody and DAB staining



Immunohistochemistry

Image 2. Formalin-fixed and paraffin embedded rat colon labeled with Anti-phospho-IRAK4(Thr345)Polyclonal Antibody, Unconjugated (ABIN753538) at 1:200 followed by conjugation to the secondary antibody and DAB staining



SDS-PAGE

Image 3. Rat lung lysates probed with Anti-phospho-IRAK4 (Thr345) Polyclonal Antibody (ABIN753538) at 1:200 in 4 °C. Followed by conjugation to secondary antibody at 1:3000 90min in 37 °C. Predicted band 51 kDa and observed band size: 60kDa