

## Mouse Taok3 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17319a

## **Specification**

## Mouse Taok3 Antibody (N-term) - Product Information

Application WB,E
Primary Accession Q8BYC6

Other Accession NP 001074777.1

Reactivity
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region

Mouse
Rabbit
Rabbit
Polyclonal
Rabbit IgG
257-284

## Mouse Taok3 Antibody (N-term) - Additional Information

#### Gene ID 330177

#### **Other Names**

Serine/threonine-protein kinase TAO3, Thousand and one amino acid protein 3, Taok3

#### Target/Specificity

This Mouse Taok3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 257-284 amino acids from the N-terminal region of mouse Taok3.

#### **Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

## **Precautions**

Mouse Taok3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Mouse Taok3 Antibody (N-term) - Protein Information

### Name Taok3

Function Serine/threonine-protein kinase that acts as a regulator of the p38/MAPK14



stress-activated MAPK cascade and of the MAPK8/JNK cascade (By similarity). In response to DNA damage, involved in the G2/M transition DNA damage checkpoint by activating the p38/MAPK14 stress-activated MAPK cascade, probably by mediating phosphorylation of upstream MAP2K3 and MAP2K6 kinases (By similarity). Inhibits basal activity of the MAPK8/INK cascade and diminishes its activation in response to epidermal growth factor (EGF) (By similarity). Positively regulates canonical T cell receptor (TCR) signaling by preventing early PTPN6/SHP1-mediated inactivation of LCK, ensuring sustained TCR signaling that is required for optimal activation and differentiation of T cells (By similarity). Phosphorylates PTPN6/SHP1 on 'Thr-394', leading to its polyubiquitination and subsequent proteasomal degradation (By similarity). Required for cell surface expression of metalloprotease ADAM10 on type 1 transitional B cells which is necessary for their NOTCH-mediated development into marginal zone B cells (PubMed: 28068307). Also required for the NOTCH-mediated terminal differentiation of splenic conventional type 2 dendritic cells (PubMed: 33214146). Positively regulates osteoblast differentiation by acting as an upstream activator of the JNK pathway (PubMed: 32807497). Promotes JNK signaling in hepatocytes and positively regulates hepatocyte lipid storage by inhibiting beta-oxidation and triacylglycerol secretion while enhancing lipid synthesis (By similarity). Restricts age-associated inflammation by negatively regulating differentiation of macrophages and their production of pro-inflammatory cytokines (PubMed: 37400834). Plays a role in negatively regulating the abundance of regulatory T cells in white adipose tissue (PubMed: 37347461).

#### **Cellular Location**

Cytoplasm {ECO:0000250|UniProtKB:Q9H2K8}. Cell membrane {ECO:0000250|UniProtKB:Q9H2K8}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q9H2K8}. Membrane raft {ECO:0000250|UniProtKB:Q9H2K8}. Lipid droplet. Note=Located primarily outside cell membrane rafts and remains outside upon canonical TCR ligation (By similarity). A small pool is detectable in cell membrane rafts in resting conditions but relocates outside the rafts upon TCR signaling (By similarity). Localizes to lipid droplets in hepatocytes (PubMed:34634521). {ECO:0000250|UniProtKB:Q9H2K8, ECO:0000269|PubMed:34634521}

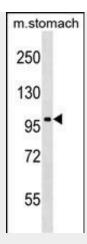
## Mouse Taok3 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Mouse Taok3 Antibody (N-term) - Images





Mouse Taok3 Antibody (N-term) (Cat. #AP17319a) western blot analysis in mouse stomach tissue lysates (35ug/lane). This demonstrates the Taok3 antibody detected the Taok3 protein (arrow).

# Mouse Taok3 Antibody (N-term) - Background

Inhibits the basal activity of Jun kinase. Negatively regulated by epidermal growth factor (EGF). When overexpressed, may activate ERK1/ERK2 and JNK/SAPK (By similarity).

# Mouse Taok3 Antibody (N-term) - References

Stryke, D., et al. Nucleic Acids Res. 31(1):278-281(2003)