Phospho-TBK1-T156 Rabbit Polyclonal Antibody

Protein Background



Serine/threonine kinase that plays an essential role in regulating inflammatory responses to foreign agents (PubMed:10581243, PubMed:15210742, PubMed:15661922). Following

activation of toll-like receptors by viral or bacterial components, associates with TRAF3 and TANK and phosphorylates interferon regulatory factors (IRFs) IRF3 and IRF7 as well as DDX3X

(By similarity). This activity allows subsequent homodimerization and nuclear translocation of the IRFs leading to transcriptional activation of pro-inflammatory and antiviral genes including

IFNA and IFNB (By similarity). In order to establish such an antiviral state, TBK1 form several

different complexes whose composition depends on the type of cell and cellular stimuli (By similarity). Thus, several scaffolding molecules including FADD, TRADD, MAVS, AZI2, TANK or

TBKBP1/SINTBAD can be recruited to the TBK1-containing-complexes (By similarity). Plays a key role in IRF3 activation: acts by first phosphorylating innate adapter proteins MAVS, STING1

and TICAM1 on their pLxIS motif, leading to recruitment of IRF3, thereby licensing IRF3 for phosphorylation by TBK1 (By similarity). Under particular conditions, functions as a NF-kappa-

B effector by phosphorylating NF-kappa-B inhibitor alpha/NFKBIA, IKBKB or RELA to translocate NF-Kappa-B to the nucleus (By similarity). Restricts bacterial proliferation by

phosphorylating the autophagy receptor OPTN/Optineurin on 'Ser-177', thus enhancing LC3

binding affinity and antibacterial autophagy (By similarity). Phosphorylates SMCR8 component of the C9orf72-SMCR8 complex, promoting autophagosome maturation (By similarity). Phosphorylates and activates AKT1 (By similarity). Seems to play a role in energy balance regulation by sustaining a state of chronic, low-grade inflammation in obesity, wich leads to a

CABP1087

Product Information

Size:

20uL, 50uL, 100uL, 200uL

Observed MW:

Refer to Figures

Calculated MW:

83kDa

Applications:

WB

Reactivity:

Human, Mouse, Rat

Antibody Information

Recommended dilutions:

WB 1:500 - 1:2000

Source:

Rabbit

Immunogen information

Gene ID:

56480

Uniprot

Isotype:

lgG

Synonyms:

1200008B05Rik; Al462036; AW048562; TBK1; FTDALS4; NAK; T2K

negative impact on insulin sensitivity (PubMed:23396211).

Purification:

Affinity purification

Immunogen:

A phospho specific peptide corresponding to residues surrounding T156 of human TBK1.

Storage:

Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.