TBK1 (6D603): sc-73115

BACKGROUND

The transcription factor NFκB is retained in the cytoplasm in an inactive form by the inhibitory protein IκB. Activation of NFκB requires that IκB be phosphorylated on specific serine residues, which results in targeted degradation of IκB. IκB kinase α (IKKα), previously designated CHUK, interacts with IκB-α and specifically phosphorylates IκB-α on the sites that trigger its degradation, serines 32 and 36. The functional IKK complex contains three subunits, IKKα, IKKβ and IKKγ (also designated NEMO), and each appear to make essential contributions to IκB phosphorylation. TANK binding kinase (TBK1), also designated T2K, is a novel IKK-related kinase that has been identified in murine and human tissues. TBK1 was shown to complex with TRAF2 and TANK in the NFκB activation pathway. TBK1 shares homology with IKKα and IKKβ in the amino-terminal half, which includes the kinase domain.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: TBK1 (human) mapping to 12q14.2; Tbk1 (mouse) mapping to 10 D2.

SOURCE

TBK1 (6D603) is a mouse monoclonal antibody raised against a synthetic peptide corresponding to amino acids 563-577 of TBK1 of human origin.

PRODUCT

Each vial contains 50 μg IgG in 500 μl PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

TBK1 (6D603) is recommended for detection of TBK1 of mouse, rat, human, bovine and canine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 μg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for TBK1 siRNA (h): sc-39058, TBK1 siRNA (m): sc-39059, TBK1 shRNA Plasmid (h): sc-39058-SH, TBK1 shRNA Plasmid (m): sc-39059-SH, TBK1 shRNA (h) Lentiviral Particles: sc-39058-V and TBK1 shRNA (m) Lentiviral Particles: sc-39059-V.

Molecular Weight of TBK1: 80 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, RAW 264.7 whole cell lysate: sc-2211 or KNRK whole cell lysate: sc-2214.

DATA

TBK1 (6D603): sc-73115. Western blot analysis of TBK1 expression in MCF7 (A), THP-1 (B), NTERA-2 cl.D1 (C) and Jurkat (D) whole cell lysates.

SELECT PRODUCT CITATIONS


STORAGE

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our website at www.scbt.com for detailed protocols and support products.