

Pellino 1 (V-15): sc-31618

BACKGROUND

Mammalian Pellino proteins 1-3 (pellino *Drosophila* homolog 1-3) are scaffolding components within Toll-like receptor (TLR) and Interleukin-1 (IL-1) receptor signaling cascades. Pellino 1 and 3 interact with complexes that also contain IL-1R-associated kinase 4 (IRAK4) and tumor necrosis factor receptor-associated factor 6 (TRAF6). Pellino 1, 2 and 3 interact with TAK1 (TGF β activated kinase 1). Pellino 2 can initiate mitogen activated protein kinase pathways leading to activation of AP-1 and Elk-1. Pellino 3 promotes translocation of MAPK-activated protein kinase2 from the nucleus to the cytoplasm and activates transcription factor CREB in a p38 MAPK-dependent manner. Pellino 3 physically interacts with NF κ B-inducing kinase (NIK) in an IL-1-dependent manner and leads to activation of c-Jun, Elk-1 and c-Jun N-terminal kinase.

REFERENCES

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- Jiang, Z., et al. 2003. Pellino 1 is required for interleukin-1 (IL-1)-mediated signaling through its interaction with the IL-1 receptor-associated kinase 4 (IRAK4)-IRAK-tumor necrosis factor receptor-associated factor 6 (TRAF6) complex. *J. Biol. Chem.* 278: 10952-10956.
- Jensen, L.E., et al. 2003. Pellino2 activates the mitogen activated protein kinase pathway. *FEBS Lett.* 545: 199-202.
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- Butler, M.P., et al. 2005. Pellino3 is a novel upstream regulator of p38 MAPK and activates CREB in a p38-dependent manner. *J. Biol. Chem.* 280: 27759-27768.

CHROMOSOMAL LOCATION

Genetic locus: PELI1 (human) mapping to 2p14; Peli1 (mouse) mapping to 11 A3.1.

SOURCE

Pellino 1 (V-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Pellino 1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-31618 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Pellino 1 (V-15) is recommended for detection of Pellino 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with Pellino 2 and 3.

Pellino 1 (V-15) is also recommended for detection of Pellino 1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Pellino 1 siRNA (h): sc-44401, Pellino 1 siRNA (m): sc-44939, Pellino 1 shRNA Plasmid (h): sc-44401-SH, Pellino 1 shRNA Plasmid (m): sc-44939-SH, Pellino 1 shRNA (h) Lentiviral Particles: sc-44401-V and Pellino 1 shRNA (m) Lentiviral Particles: sc-44939-V.

Molecular Weight of Pellino 1: 46 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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 web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **Pellino 1/2 (F-7): sc-271065**, our highly recommended monoclonal alternative to Pellino 1 (V-15). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Pellino 1/2 (F-7): sc-271065**.