

Pellino 2 (C-13): sc-31621

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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- Resch, K., et al. 2001. Assignment of homologous genes, Peli1/PELI1 and Peli2/PELI2, for the Pelle adaptor protein Pellino to mouse chromosomes 11 and 14 and human chromosomes 2p13.3 and 14q21, respectively, by physical and radiation hybrid mapping. *Cytogenet. Cell Genet.* 92: 172-174.
- Yu, K.Y., et al. 2002. Cutting edge: mouse pellino-2 modulates IL-1 and lipopolysaccharide signaling. *J. Immunol.* 169: 4075-4078.
- 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.
- Jensen, L.E., et al. 2003. Pellino3, a novel member of the Pellino protein family, promotes activation of c-Jun and Elk-1 and may act as a scaffolding protein. *J. Immunol.* 171: 1500-1506.

CHROMOSOMAL LOCATION

Genetic locus: PELI2 (human) mapping to 14q22.3; (mouse) mapping to 14 C1.

SOURCE

Pellino 2 (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Pellino 2 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-31621 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4 $^{\circ}$ C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Pellino 2 (C-13) is recommended for detection of Pellino 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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 1 and 3.

Pellino 2 (C-13) is also recommended for detection of Pellino 2 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for Pellino 2 siRNA (h): sc-44402, Pellino 2 siRNA (m): sc-44940, Pellino 2 shRNA Plasmid (h): sc-44402-SH, Pellino 2 shRNA Plasmid (m): sc-44940-SH, Pellino 2 shRNA (h) Lentiviral Particles: sc-44402-V and Pellino 2 shRNA (m) Lentiviral Particles: sc-44940-V.

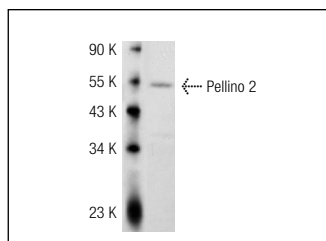
Molecular Weight of Pellino 2: 46.3 kDa.

Positive Controls: Ramos cell lysate: sc-2216.

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 MarkerTM compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz MarkerTM Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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 UltraCruzTM Mounting Medium: sc-24941.

DATA



Pellino 2 (C-13): sc-31621. Western blot analysis of Pellino 2 expression in Ramos whole cell lysate.

RESEARCH USE

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


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