

Pellino 1/2 (F-7): sc-271065

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 (IRAK-4) 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 kinase 2 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.

CHROMOSOMAL LOCATION

Genetic locus: PELI1 (human) mapping to 2p14, PELI2 (human) mapping to 14q22.3; Peli1 (mouse) mapping to 11 A3.1, Peli2 (mouse) mapping to 14 C1.

SOURCE

Pellino 1/2 (F-7) is a mouse monoclonal antibody raised against amino acids 151-255 mapping within an internal region of Pellino 1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Pellino 1/2 (F-7) is available conjugated to agarose (sc-271065 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271065 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-271065 PE), fluorescein (sc-271065 FITC), Alexa Fluor[®] 488 (sc-271065 AF488), Alexa Fluor[®] 546 (sc-271065 AF546), Alexa Fluor[®] 594 (sc-271065 AF594) or Alexa Fluor[®] 647 (sc-271065 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-271065 AF680) or Alexa Fluor[®] 790 (sc-271065 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Pellino 1/2 (F-7) is recommended for detection of Pellino 1 and Pellino 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Pellino 1/2 (F-7) is also recommended for detection of Pellino 1 and Pellino 2 in additional species, including equine, canine, bovine and porcine.

Molecular Weight of Pellino 1/2: 46 kDa.

Positive Controls: Ramos whole cell lysate: sc-2216, RAW 264.7 whole cell lysate: sc-2211 or Raji whole cell lysate: sc-364236.

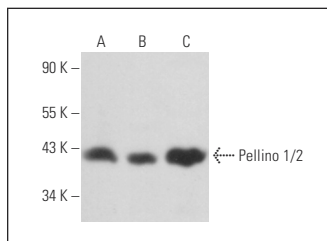
RESEARCH USE

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

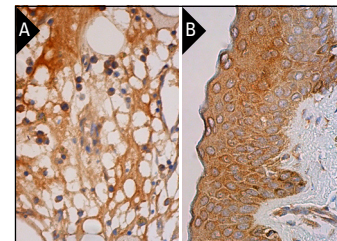
STORAGE

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

DATA



Pellino 1/2 (F-7): sc-271065. Western blot analysis of Pellino 1/2 expression in Ramos (A), RAW 264.7 (B) and Raji (C) whole cell lysates.



Pellino 1/2 (F-7): sc-271065. Immunoperoxidase staining of formalin fixed, paraffin-embedded human bone marrow tissue showing cytoplasmic staining of hematopoietic and reticular cells (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human skin tissue showing cytoplasmic staining of keratinocytes, fibroblasts and melanocytes (B).

SELECT PRODUCT CITATIONS

- Chang, M., et al. 2011. The ubiquitin ligase Peli1 negatively regulates T cell activation and prevents autoimmunity. *Nat. Immunol.* 12: 1002-1009.
- Jeon, Y.K., et al. 2016. Pellino 1 confers chemoresistance in lung cancer cells by upregulating cIAP2 through Lys63-mediated polyubiquitination. *Oncotarget* 7: 41811-41824.
- Jeon, Y.K., et al. 2017. Pellino 1 promotes lung carcinogenesis via the stabilization of Slug and Snail through K63-mediated polyubiquitination. *Cell Death Differ.* 24: 469-480.
- Liu, J., et al. 2018. Peli1 negatively regulates noncanonical NF κ B signaling to restrain systemic lupus erythematosus. *Nat. Commun.* 9: 1136.
- Dai, D., et al. 2019. Peli1 controls the survival of dopaminergic neurons through modulating microglia-mediated neuroinflammation. *Sci. Rep.* 9: 8034.
- Wang, L., et al. 2020. Pellino 1 contributes to morphine tolerance by microglia activation via MAPK signaling in the spinal cord of mice. *Cell. Mol. Neurobiol.* 40: 1117-1131.
- Mulas, F., et al. 2021. The deubiquitinase OTUB1 augments NF κ B-dependent immune responses in dendritic cells in infection and inflammation by stabilizing UBC13. *Cell. Mol. Immunol.* 18: 1512-1527.
- Darvishi, E., et al. 2022. Anti-cancer activity of ST101, a novel antagonist of CCAAT/enhancer binding protein β . *Mol. Cancer Ther.* 21: 1632-1644.

PROTOCOLS

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

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