

# DANGER (H-7): sc-514861

## BACKGROUND

The inositol 1,4,5-triphosphate receptor, IP3R, acts as an inositol triphosphate (IP3)-gated calcium release channel in a variety of cell types. Three IP3 receptor subtypes have been described and are designated IP3R-I, IP3R-II and IP3R-III. DANGER, also known as inositol 1,4,5-triphosphate receptor-interacting protein (ITPRIP) or KIAA1754, is a 547 amino acid protein that interacts with IP3 receptors. Localized to the cell membrane, DANGER enhances Ca<sup>2+</sup>-regulated inhibition of IP3R Ca<sup>2+</sup> release. The gene that encodes DANGER maps to human chromosome 10. Spanning nearly 135 million base pairs, chromosome 10 makes up approximately 4.5% of total DNA in cells and encodes nearly 1,200 genes. Several protein-coding genes, including those that encode for chemokines, cadherins, excision repair proteins, early growth response factors (Egrs) and fibroblast growth receptors (FGFRs), are located on chromosome 10.

## REFERENCES

1. Johnson, P. and Benchimol, S. 1992. Friend virus induced murine erythroleukaemia: the p53 locus. *Cancer Surv.* 12: 137-151.
2. Blondel, O., et al. 1993. Sequence and functional characterization of a third inositol trisphosphate receptor subtype, IP3R-3, expressed in pancreatic islets, kidney, gastrointestinal tract, and other tissues. *J. Biol. Chem.* 268: 11356-11363.
3. Cameron, A.M., et al. 1995. Calcineurin associated with the inositol 1,4,5-trisphosphate receptor-FKBP12 complex modulates Ca<sup>2+</sup> flux. *Cell* 83: 463-472.

## CHROMOSOMAL LOCATION

Genetic locus: Itrip1 (mouse) mapping to 19 D1.

## SOURCE

DANGER (H-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 419-434 near the C-terminus of DANGER of mouse origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

DANGER (H-7) is available conjugated to agarose (sc-514861 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514861 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514861 PE), fluorescein (sc-514861 FITC), Alexa Fluor<sup>®</sup> 488 (sc-514861 AF488), Alexa Fluor<sup>®</sup> 546 (sc-514861 AF546), Alexa Fluor<sup>®</sup> 594 (sc-514861 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-514861 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-514861 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-514861 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514861 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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## APPLICATIONS

DANGER (H-7) is recommended for detection of DANGER of mouse origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Suitable for use as control antibody for DANGER siRNA (m): sc-142872, DANGER shRNA Plasmid (m): sc-142872-SH and DANGER shRNA (m) Lentiviral Particles: sc-142872-V.

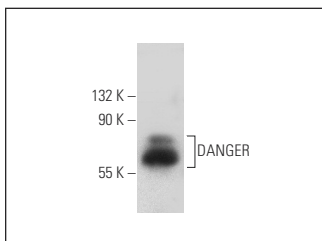
Molecular Weight of DANGER: 62 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210 or mouse brain extract: sc-2253.

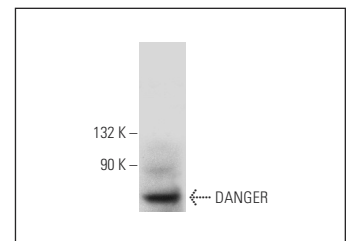
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

## DATA



DANGER (H-7): sc-514861. Western blot analysis of DANGER expression in mouse brain tissue extract.



DANGER (H-7): sc-514861. Western blot analysis of DANGER expression in NIH/3T3 whole cell lysate.

## 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](http://www.scbt.com) for detailed protocols and support products.