SANTA CRUZ BIOTECHNOLOGY, INC.

ML-IAP (C-12): sc-33955

BACKGROUND

Inhibitor of apoptosis proteins (IAPs) contain conserved, unique N-terminal baculovirus IAP repeats (BIRs) and usually a C-terminal RING finger domain. Immunoprecipitation and Western blot analysis indicate that ML-IAP, also known as melanoma inhibitor of apoptosis protein, kidney inhibitor of apoptosis protein (KIAP), livin or BIRC7, binds to caspase-3, -7 and -9, but only inhibits caspase-9. Additionally, ML-IAP physically interacts with Smac through its BIR domain with a very high affinity and this interaction is very specific. The gene which encodes ML-IAP maps to human chromosome 20q13.33. There is controversy regarding the localization of this protein and its involvement in apoptosis, but it has been suggested that ML-IAP may play a complex role in the regulation of apoptosis.

REFERENCES

1. Vucic, D., et al. 2000. ML-IAP, a novel inhibitor of apoptosis that is preferentially expressed in human melanomas. Curr. Biol. 10: 1359-1366.
2. Lin, J.H., et al. 2000. KIAP, a novel member of the inhibitor of apoptosis protein family. Biochem. Biophys. Res. Commun. 279: 820-831.
3. Ashhab, Y., et al. 2001. Two splicing variants of a new inhibitor of apoptosis gene with different biological properties and tissue distribution pattern. FEBS Lett. 495: 56-60.
4. Online Mendelian Inheritance in Man, OMIM™. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 605737. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
5. Vucic, D., et al. 2002. Smac negatively regulates the anti-apoptotic activity of melanoma inhibitor of apoptosis (ML-IAP). J. Biol. Chem. 277: 12275-12279.

CHROMOSOMAL LOCATION

Genetic locus: BIRC7 (human) mapping to 20q13.33.

SOURCE

ML-IAP (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of ML-IAP of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-33955 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

PROTOCOLS

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

APPLICATIONS

ML-IAP (C-12) is recommended for detection of ML-IAP of 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).

Suitable for use as control antibody for ML-IAP siRNA (h): sc-37510, ML-IAP shRNA Plasmid (h): sc-37510-SH and ML-IAP shRNA (h) Lentiviral Particles: sc-37510-V.

Molecular Weight of full length ML-IAP: 40 kDa.

Molecular Weight of ML-IAP cleavage fragment: 30 kDa.

Positive Controls: SK-MEL-28 cell lysate: sc-2236, H4 cell lysate: sc-2408 or HeLa whole cell lysate: sc-2200.

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.

RESEARCH USE

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