SANTA CRUZ BIOTECHNOLOGY, INC.

ML-IAP (H-90): sc-30161

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The Power to Question

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.

CHROMOSOMAL LOCATION

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

SOURCE

ML-IAP (H-90) is a rabbit polyclonal antibody raised against amino acids 151-240 mapping within an internal region 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.

STORAGE

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

APPLICATIONS

ML-IAP (H-90) is recommended for detection of ML-IAP isoforms 1-3 of human origin by Western Blotting (starting dilution 1:200, 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 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.

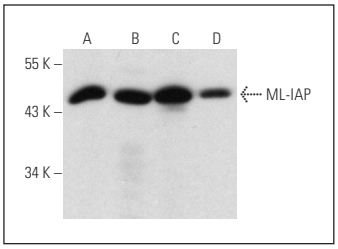
Molecular Weight of ML-IAP cleavage fragment: 30 kDa.

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 goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



ML-IAP (H-90): sc-30161. Western blot analysis of ML-IAP expression in H4 (**A**), SK-MEL-28 (**B**), HeLa (**C**) and A-431 (**D**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Ye, L., et al. 2011. Livin-α promotes cell proliferation by regulating G_1-S cell cycle transition in prostate cancer. Prostate 71: 42-51.
2. Ye, L., et al. 2012. Livin expression may be regulated by miR-198 in human prostate cancer cell lines. Eur. J. Cancer 49: 734-740.

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.