SANTA CRUZ BIOTECHNOLOGY, INC.

ILPIP (C-15): sc-48546



BACKGROUND

ILPIP (ILP-interacting protein), also designated amyotrophic lateral sclerosis 2 juvenile chromosome region gene 2 (ALS2CR2), interacts with X-linked IAP (XIAP), a member of the inhibitor of apoptosis protein (IAP) family. The IAP family are caspase inhibitors that block the execution phase of apoptosis. IAPs are involved in the development and progression of solid tumors and hematologic malignancies, making them a potential target for cancer therapeutics. ILPIP enhances XIAP-mediated activation of the TGF β -activated kinase 1/c-Jun NH₂-terminal kinase 1 (TAK1/JNK1) signal transduction pathway. This pathway protects against the interleukin-1b converting enzyme of FAS-mediated apoptosis. The protection of XIAP against apoptosis by ILPIP is caspase-independent. When expressed alone, ILPIP only moderately activates the TAK1/JNK1 signal transduction pathway.

REFERENCES

- Hadano, S., et al. 2001. Cloning and characterization of three novel genes, ALS2CR1, ALS2CR2, and ALS2CR3, in the juvenile amyotrophic lateral sclerosis (ALS2) critical region at chromosome 2q33-q34: candidate genes for ALS2. Genomics 71: 200-213.
- 2. Sanna, M.G., et al. 2002. ILPIP, a novel anti-apoptotic protein th of JNK1 and protection against apoptosis. J. Biol. Chem. 277: 30454-30462.
- 3. Strausberg, R.L., et al. 2002. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. Proc. Nat. Acad. Sci. USA 99: 16899-16903.
- 4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607333. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Hillier, L.W., et al. 2005. Generation and annotation of the DNA sequences of human chromosomes 2 and 4. Nature 434: 724-731.
- Schimmer, A.D., et al. 2005. Targeting the IAP family of caspase inhibitors as an emerging therapeutic strategy. Hematology Am. Soc. Hematol. Educ. Program 215-219.

CHROMOSOMAL LOCATION

Genetic locus: STRADB (human) mapping to 2q33.1; Stradb (mouse) mapping to 1 C1.3.

SOURCE

ILPIP (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ILPIP 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-48546 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

ILPIP (C-15) is recommended for detection of ILPIP- α and ILPIP- β of mouse, rat and 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).

ILPIP (C-15) is also recommended for detection of ILPIP- α and ILPIP- β in additional species, including equine.

Suitable for use as control antibody for ILPIP siRNA (h): sc-60842, ILPIP siRNA (m): sc-60843, ILPIP shRNA Plasmid (h): sc-60842-SH, ILPIP shRNA Plasmid (m): sc-60843-SH, ILPIP shRNA (h) Lentiviral Particles: sc-60842-V and ILPIP shRNA (m) Lentiviral Particles: sc-60843-V.

Molecular Weight of ILPIPa: 52 kDa.

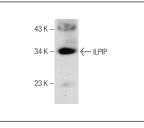
Molecular Weight of ILPIPβ: 35 kDa

Positive Controls: A-10 cell lysate: sc-3806.

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) 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 UltraCruz™ Mounting Medium: sc-24941.

DATA



ILPIP (C-15): sc-48546. Western blot analysis of ILPIP expression in A-10 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.

PROTOCOLS

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