

LAP3 (6K6): sc-134378

BACKGROUND

LAP3 (leucine aminopeptidase 3), also known as LAPEP or PEPS, is a 519 amino acid protein that localizes to the cytoplasm and belongs to the peptidase M17 family. Existing as a homohexamer, LAP3 uses zinc as a cofactor to catalyze the release of an N-terminal proline from a target peptide and is, therefore, involved in the processing and turnover of intracellular proteins. Multiple isoforms of LAP3 exist due to alternative splicing events. The gene encoding LAP3 maps to human chromosome 4, which houses nearly 6% of the human genome and has the largest gene deserts (regions of the genome with no protein encoding genes) of all of the human chromosomes. Defects in some of the genes located on chromosome 4 are associated with Huntington's disease, Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: LAP3 (human) mapping to 4p15.32.

SOURCE

LAP3 (6K6) is a mouse monoclonal antibody raised against recombinant LAP3 protein of human origin.

STORAGE

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

PRODUCT

Each vial contains 100 µg IgG_{2a} in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

LAP3 (6K6) is recommended for detection of LAP3 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for LAP3 siRNA (h): sc-75411, LAP3 shRNA Plasmid (h): sc-75411-SH and LAP3 shRNA (h) Lentiviral Particles: sc-75411-V.

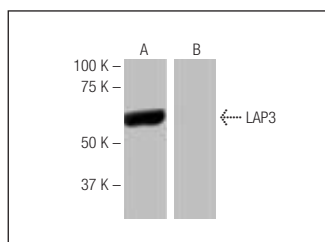
Molecular Weight of LAP3 monomer: 55 kDa.

Molecular Weight of LAP3 homohexamer: 300 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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).

DATA



LAP3 (6K6): sc-134378. Western blot analysis of LAP3 expression in human LAP3 transfected (A) and non-transfected (B) 293T whole cell lysates.

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.