

leupaxin (E-12): sc-241524

BACKGROUND

Leupaxin, also designated LDPL or LPXN, is a 386 amino acid cytoplasmic protein and member of the paxillin family. Leupaxin is highly expressed in lymphoid tissues such as spleen, lymph node, thymus and appendix, with low expression in bone marrow and fetal liver. Consisting of four leucine-rich LD-motifs at the N-terminus and four LIM domains at the C-terminus, leupaxin associates with a member of the focal adhesion kinase family, PYK2, in lymphoid cells. The leupaxin and PYK2 complex is involved in cell type-specific signaling in which it regulates signaling at sites of adhesion. Leupaxin is a substrate for tyrosine kinase in lymphoid cells and is suggested to participate in and be regulated by tyrosine kinase activity. Leupaxin may be a potential progression marker for a subset of prostate cancer and may act as a novel coactivator of the androgen receptor.

REFERENCES

1. Lipsky, B.P., et al. 1998. Leupaxin is a novel LIM domain protein that forms a complex with PYK2. *J. Biol. Chem.* 273: 11709-11713.
2. Gupta, A., et al. 2003. Leupaxin is a critical adaptor protein in the adhesion zone of the osteoclast. *J. Bone Miner. Res.* 18: 669-685.
3. Watanabe, N., et al. 2005. Leupaxin binds to PEST domain tyrosine phosphatase PEP. *Mol. Cell. Biochem.* 269: 13-17.
4. Chew, V. and Lam, K.P. 2007. Leupaxin negatively regulates B cell receptor signaling. *J. Biol. Chem.* 282: 27181-27191.
5. Sundberg-Smith, L.J., et al. 2008. The LIM protein leupaxin is enriched in smooth muscle and functions as a serum response factor cofactor to induce smooth muscle cell gene transcription. *Circ. Res.* 102: 1502-1511.

CHROMOSOMAL LOCATION

Genetic locus: LPXN (human) mapping to 11q12.1; Lpxn (mouse) mapping to 19 A.

SOURCE

leupaxin (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of leupaxin 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-241524 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

leupaxin (E-12) is recommended for detection of leupaxin of mouse, rat and 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 leupaxin siRNA (h): sc-96309, leupaxin siRNA (m): sc-146715, leupaxin shRNA Plasmid (h): sc-96309-SH, leupaxin shRNA Plasmid (m): sc-146715-SH, leupaxin shRNA (h) Lentiviral Particles: sc-96309-V and leupaxin shRNA (m) Lentiviral Particles: sc-146715-V.

Molecular Weight of leupaxin doublet: 45/47 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, Ramos cell lysate: sc-2216 or Raji whole cell lysate.

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.


 MONOS
 Satisfaction
 Guaranteed

Try **leupaxin (B-2): sc-376820** or **leupaxin (F-12): sc-376903**, our highly recommended monoclonal alternatives to leupaxin (E-12).