

Lyst (N-12): sc-136746

BACKGROUND

Proteins that contain WD-repeats participate in a wide range of cellular functions, including chromatin assembly, cell cycle control, signal transduction, RNA processing, apoptosis and vesicular trafficking. LYST (lysosomal trafficking regulator), also referred to as CHS or CHS1, is a 3,801 amino acid cytoplasmic protein that is abundantly expressed in adult and fetal thymus, peripheral blood leukocytes, bone marrow and several regions of adult brain. Existing as three alternatively spliced isoforms and consisting of one BEACH domain and seven WD repeats, Lyst is suggested to play a critical role in sorting endosomal resident proteins into late multivesicular endosomes. Lyst associates with CENPJ, Centrobin and EHZF. Defects in the gene encoding Lyst leads to Chediak-Higashi syndrome (CHS), a rare autosomal recessive disorder characterized by hypopigmentation, severe immunologic deficiency, a bleeding tendency, neurologic abnormalities, abnormal intracellular transport to and from the lysosome and giant inclusion bodies in a variety of cell types.

REFERENCES

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4. Karim, M.A., et al. 2002. Apparent genotype-phenotype correlation in childhood, adolescent, and adult Chediak-Higashi syndrome. *Am. J. Med. Genet.* 108: 16-22.
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CHROMOSOMAL LOCATION

Genetic locus: LYST (human) mapping to 1q42.3; Lyst (mouse) mapping to 13 A1.

SOURCE

Lyst (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Lyst 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-136746 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Lyst (N-12) is recommended for detection of Lyst isoforms 1-3 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).

Lyst (N-12) is also recommended for detection of Lyst isoforms 1-3 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Lyst siRNA (h): sc-88631, Lyst siRNA (m): sc-149193, Lyst shRNA Plasmid (h): sc-88631-SH, Lyst shRNA Plasmid (m): sc-149193-SH, Lyst shRNA (h) Lentiviral Particles: sc-88631-V and Lyst shRNA (m) Lentiviral Particles: sc-149193-V.

Molecular Weight of Lyst: 430 kDa.

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.

STORAGE

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

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.