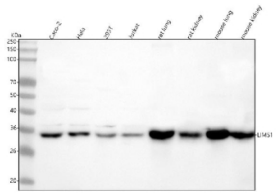
LIMS1 Antibody / LIM and senescent cell antigen-like-containing domain protein 1 (FY12254)

Catalog No.	Formulation	Size
FY12254	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	P48059
Applications	Western Blot: 0.25-0.5ug/ml ELISA: 0.1-0.5ug/ml
Limitations	This LIMS1 antibody is available for research use only.



Western blot analysis of LIMS1 using anti-LIMS1 antibody. Lane 1: human Caco-2 whole cell lysates, Lane 2: human Hela whole cell lysates, Lane 3: human 293T whole cell lysates, Lane 4: human Jurkat whole cell lysates, Lane 5: rat lung tissue lysates, Lane 6: rat kidney tissue lysates, Lane 7: mouse lung tissue lysates, Lane 8: mouse kidney tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-LIMS1 antibody at 0.5 ug/ml overnight at 4oC, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal was developed using enhanced chemiluminescent. A specific band was detected for LIMS1 at approximately 37 kDa. The expected band size for LIMS1 is at 37 kDa.

Description

LIMS1 antibody detects LIM and senescent cell antigen-like-containing domain protein 1, encoded by the LIMS1 gene on

chromosome 2q12.3. LIMS1 antibody is widely applied in studies of integrin signaling, cell adhesion, and cancer biology. LIMS1, also known as PINCH1, is a LIM domain-containing adaptor protein that localizes to focal adhesions, where it connects integrins with the actin cytoskeleton and signaling pathways. It plays a central role in cell-matrix interactions and regulation of survival, proliferation, and migration.

Structurally, LIMS1 is a ~37 kDa protein composed of five LIM domains, which mediate protein-protein interactions. Through these domains, LIMS1 interacts with integrin-linked kinase (ILK) and parvin to form the IPP complex, a key signaling hub at focal adhesions. This complex links extracellular matrix adhesion with intracellular signaling cascades.

Functionally, LIMS1 stabilizes focal adhesions and promotes integrin-mediated signaling. It regulates pathways including PI3K-Akt, MAPK, and Rho GTPase signaling, influencing survival, motility, and cytoskeletal organization. Knockout models demonstrate that LIMS1 is essential for embryonic development and cell viability. Researchers use LIMS1 antibody to investigate adhesion signaling, integrin function, and tumor progression.

Clinically, LIMS1 is associated with cancer, where its overexpression promotes invasion and metastasis by enhancing integrin signaling. It also influences therapy resistance in multiple tumor types. Genetic studies have linked LIMS1 variants to immune function and kidney transplantation outcomes, suggesting roles beyond adhesion. NSJ Bioreagents supplies LIMS1 antibody for use in adhesion biology, immunology, and oncology.

Experimentally, LIMS1 antibody is applied in western blotting to detect the ~37 kDa protein, in immunofluorescence to visualize focal adhesion localization, and in immunohistochemistry to assess tumor expression. Co-immunoprecipitation with LIMS1 antibody identifies ILK, parvin, and integrin-binding partners.

Application Notes

Optimal dilution of the LIMS1 antibody should be determined by the researcher.

Immunogen

E.coli-derived human LIMS1 recombinant protein (Position: E11-A172) was used as the immunogen for the LIMS1 antibody.

Storage

After reconstitution, the LIMS1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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