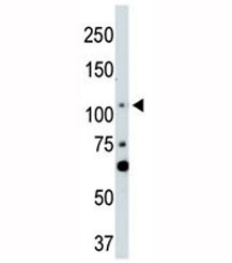
LATS2 Antibody (F40138)

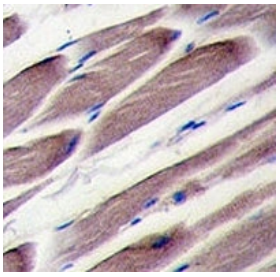
Catalog No.	Formulation	Size
F40138-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F40138-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	Q9NRM7
Applications	Western Blot : 1:1000 IHC (Paraffin) : 1:10-1:50
Limitations	This LATS2 antibody is available for research use only.



LATS2 antibody used in western blot to detect LATS2 in NIH3T3 cell lysate



IHC analysis of FFPE human skeletal muscle tissue stained with LATS2 antibody

Description

The LATS2 antibody is designed to detect large tumor suppressor kinase 2, also called LATS2 or PRKCL2, a serine threonine kinase that acts as a central regulator of the Hippo pathway. This signaling pathway plays an essential role in limiting cell growth and ensuring tissue homeostasis by phosphorylating transcriptional regulators such as YAP and TAZ. Through this activity, LATS2 suppresses uncontrolled proliferation and promotes apoptosis in response to DNA damage or cellular stress.

The LATS2 protein is structurally characterized by conserved kinase domains, regulatory motifs, and docking sites that allow it to interact with multiple binding partners. By integrating upstream signals from membrane receptors, cytoskeletal proteins, and stress sensors, LATS2 fine tunes cellular responses that govern proliferation, differentiation, and genomic stability. Loss of function mutations or reduced expression of LATS2 have been observed in breast cancer, sarcoma, glioma, and other malignancies, highlighting its significance as a tumor suppressor.

Researchers use the LATS2 antibody to study Hippo pathway dynamics in both normal development and disease states. In western blotting, the reagent enables precise detection of LATS2 protein levels and distinguishes it from the related kinase LATS1. In immunohistochemistry, the LATS2 antibody helps map tissue distribution and subcellular localization, often revealing enrichment at centrosomes or within the cytoplasm during mitosis. The reagent is also applied in immunoprecipitation assays to explore protein complexes that coordinate cell cycle checkpoints and DNA repair mechanisms.

Applications extend beyond basic mechanistic research. The LATS2 antibody is valuable in translational studies that investigate tumor suppressor pathways, drug responses, and patient derived xenografts. By monitoring LATS2 expression and activity, scientists can assess how Hippo pathway dysregulation contributes to tumor progression and therapeutic resistance. Such analyses may guide the development of new interventions that restore or mimic LATS2 activity in cancer cells.

NSJ Bioreagents provides the LATS2 antibody validated for reproducibility across multiple techniques. Its reliable performance supports molecular biologists, cancer researchers, and developmental biologists alike, offering a dependable tool to probe the functions of large tumor suppressor kinase 2. By combining specificity, flexibility across methods, and strong validation, the LATS2 antibody enables investigators to advance understanding of a pathway central to growth control and tumor suppression.

Application Notes

Titration of the LATS2 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 228-258 from the human protein was used as the immunogen for this LATS2 antibody.

Storage

Aliquot the LATS2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.