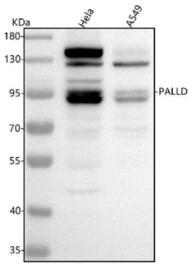
Palladin Antibody / PALLD (FY12188)

Catalog No.	Formulation	Size
FY12188	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
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	Q8WX93
Applications	Western Blot : 0.25-0.5ug/ml ELISA : 0.1-0.5ug/ml
Limitations	This Palladin antibody is available for research use only.



Western blot analysis of Palladin using anti-Palladin antibody. Lane 1: human Hela whole cell lysates, Lane 2: human whole cell 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-Palladin 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. This protein has multiple isoforms from 65-200 kDa with doublets often observed due to distinct isoforms and phosphorylation states.

Description

Palladin antibody detects Palladin, encoded by the PALLD gene on chromosome 4q32.3. Palladin antibody is widely used in research on cytoskeletal regulation, cell adhesion, and migration. Palladin is an actin-associated protein that plays essential roles in organizing the actin cytoskeleton, stabilizing focal adhesions, and coordinating cellular motility. It is expressed in fibroblasts, smooth muscle cells, neurons, and developing tissues, where it supports cell shape and

structural integrity. Palladin interacts with multiple cytoskeletal regulators, placing it at the hub of adhesion and migration networks.

Structurally, Palladin contains immunoglobulin-like (Ig-like) domains that mediate actin binding and protein-protein interactions. These domains enable Palladin to crosslink actin filaments and organize stress fibers. Palladin also interacts with focal adhesion proteins such as vinculin, alpha-actinin, and profilin. Alternative splicing generates multiple isoforms, with distinct tissue distributions and functions. These isoforms vary in size, ranging from ~90 kDa to over 200 kDa.

Functionally, Palladin regulates cell adhesion and migration by linking actin filaments to focal adhesions. It promotes stress fiber formation, lamellipodia dynamics, and directional migration. Palladin also contributes to development of tissues such as smooth muscle and nervous system by guiding cytoskeletal organization. Knockdown or mutation disrupts cell morphology and motility, confirming its essential roles. Researchers use Palladin antibody to study actin cytoskeleton biology, developmental processes, and adhesion regulation.

Clinically, Palladin has been implicated in cancer metastasis. Overexpression correlates with increased motility and invasion in pancreatic and breast cancers, while germline mutations are associated with familial pancreatic cancer. Palladin also plays roles in cardiovascular biology, where it contributes to vascular smooth muscle differentiation. Dysregulation of Palladin expression has been reported in fibrotic diseases. NSJ Bioreagents provides PALLD antibody as a reliable reagent for cytoskeletal and disease research.

Experimentally, PALLD antibody is applied in western blotting to detect isoforms of ~90Ã¯Â¿Â½200 kDa, in immunofluorescence microscopy to study actin structures, and in immunohistochemistry to examine tissue distribution. Immunoprecipitation with Palladin antibody identifies its binding partners within adhesion complexes and cytoskeletal networks.

Application Notes

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

Immunogen

E.coli-derived human Palladin/PALLD recombinant protein (Position: H89-L1383) was used as the immunogen for the Palladin antibody.

Storage

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