PALLD Antibody / Palladin [clone 31P55] (FY13153)

Catalog No.	Formulation	Size
FY13153	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human
Format	Liquid
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	31P55
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q8WX93
Applications	Western Blot : 1:500-1:2000
Limitations	This PALLD antibody is available for research use only.

Description

PALLD antibody detects Palladin, encoded by the PALLD gene. Palladin is a cytoskeletal protein that plays a central role in actin organization, cell migration, and adhesion. It functions as a scaffold that links actin filaments to signaling molecules and structural proteins, helping cells maintain shape and mobility. PALLD antibody provides researchers with an important reagent to study cytoskeletal remodeling, development, and cancer progression.

Palladin is expressed in many tissues and exists in multiple isoforms generated by alternative splicing. Research using PALLD antibody has shown that it localizes to stress fibers, focal adhesions, and cell junctions, where it promotes actin crosslinking and interaction with other actin-binding proteins. This scaffolding role is essential for coordinated cytoskeletal dynamics during development, wound healing, and tissue remodeling.

In cancer biology, Palladin has emerged as a driver of tumor invasion and metastasis. Studies with PALLD antibody have demonstrated that elevated expression enhances actin remodeling, enabling cancer cells to migrate and invade surrounding tissues. In pancreatic cancer, Palladin is strongly upregulated, where it promotes formation of invasive

protrusions. Conversely, depletion of Palladin reduces tumor cell motility and invasiveness, underscoring its pathogenic role.

Beyond oncology, Palladin is important for embryonic development and organogenesis. Research using PALLD antibody has revealed that knockout of Palladin in mice results in embryonic lethality due to defects in organ and vascular formation. Its role in fibroblast function, extracellular matrix remodeling, and smooth muscle contractility further emphasizes its significance in development and physiology.

PALLD antibody is widely applied in western blotting, immunohistochemistry, and immunofluorescence. Western blotting demonstrates multiple isoforms, immunohistochemistry shows tissue distribution, and immunofluorescence reveals colocalization with actin filaments. These applications make PALLD antibody indispensable for studies of cytoskeletal structure and signaling.

By supplying validated PALLD antibody reagents, NSJ Bioreagents supports research into actin biology, cancer progression, and development. Detection of Palladin provides a means to study how cytoskeletal scaffolding proteins regulate cellular architecture and disease.

Application Notes

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

Immunogen

A synthesized peptide derived from human Palladin was used as the immunogen for the PALLD antibody.

Storage

Store the PALLD antibody at -20oC.