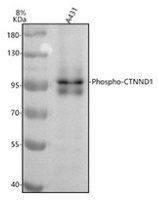
# Phospho-p120 Catenin (Tyr228) Antibody / CTNND1 [clone 32C33] (FY13312)

| Catalog No. | Formulation | Size |
|---|---|---|
| FY13312 | 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, Mouse, Rat |
| **Format** | Liquid |
| **Host** | Rabbit |
| **Clonality** | Recombinant Rabbit Monoclonal |
| **Isotype** | Rabbit IgG |
| **Clone Name** | 32C33 |
| **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** | O60716 |
| **Applications** | Western Blot : 1:500-1:2000<br>Immunohistochemistry : 1:50-1:200 |
| **Limitations** | This Phospho-p120 Catenin (Tyr228) antibody is available for research use only. |




Western blot testing of human A431 cell lysate with Phospho-p120 Catenin (Tyr228) antibody. Predicted molecular weight of isoform 1: 102-108 kDa and isoform 2: 95-102 kDa.

## Description

Phospho-p120 Catenin (Tyr228) antibody detects p120 Catenin phosphorylated at tyrosine 228, encoded by the CTNND1

gene. p120 Catenin is an armadillo repeat protein that functions as a critical regulator of cell-cell adhesion, cytoskeletal organization, and intracellular signaling. Phosphorylation at tyrosine 228 is an important post-translational modification that influences its interaction with cadherins, small GTPases, and signaling pathways. Phospho-p120 Catenin (Tyr228) antibody provides researchers with a highly specific reagent for dissecting the regulation of adherens junctions and downstream signaling events.

p120 Catenin was first identified as a substrate of Src family kinases and is now recognized as a central adaptor in adherens junctions, where it binds directly to the juxtamembrane domain of classical cadherins. Research using Phospho-p120 Catenin (Tyr228) antibody has shown that phosphorylation at Tyr228 modifies its cadherin-binding affinity, affecting junction stability and turnover. This phosphorylation also alters signaling through Rho family GTPases, impacting actin cytoskeleton dynamics and cell motility.

Studies with Phospho-p120 Catenin (Tyr228) antibody have revealed that the Tyr228 site is phosphorylated in response to growth factor stimulation, mechanical stress, and oncogenic signaling. Src and receptor tyrosine kinases mediate this modification, linking extracellular cues to junction remodeling. By regulating cell-cell adhesion, phosphorylation at Tyr228 influences epithelial-mesenchymal transition, tissue morphogenesis, and tumor invasion.

In cancer biology, aberrant phosphorylation of p120 Catenin contributes to disease progression. Research using Phospho-p120 Catenin (Tyr228) antibody has shown that elevated phosphorylation disrupts cadherin-mediated adhesion, enabling tumor cells to detach and migrate. At the same time, phosphorylation-dependent regulation of Rho family proteins promotes cytoskeletal reorganization and invasiveness. These findings highlight p120 Catenin Tyr228 phosphorylation as a potential biomarker of metastasis and therapeutic target.

Beyond cancer, p120 Catenin phosphorylation influences cardiovascular and developmental processes. Studies with Phospho-p120 Catenin (Tyr228) antibody have revealed roles in vascular integrity, cardiac morphogenesis, and neural crest development. Dysregulation of this pathway may contribute to congenital defects and vascular diseases. Because p120 Catenin integrates adhesive and signaling functions, its phosphorylation status provides insight into multiple physiological and pathological processes.

Phospho-p120 Catenin (Tyr228) antibody is widely used in western blotting, immunohistochemistry, and immunofluorescence. Western blotting distinguishes phosphorylated from non-phosphorylated forms, immunohistochemistry identifies activated signaling regions in tissues, and immunofluorescence demonstrates subcellular distribution of phosphorylated protein at junctions and in the cytoplasm. These applications make the antibody valuable in adhesion and signaling research.

By providing validated Phospho-p120 Catenin (Tyr228) antibody reagents, NSJ Bioreagents supports research into cell-cell adhesion, signal transduction, and cancer biology. Detection of p120 Catenin phosphorylated at tyrosine 228 offers a precise marker for junctional remodeling and signaling activation.

## Application Notes

Optimal dilution of the Phospho-p120 Catenin (Tyr228) antibody should be determined by the researcher.

## Immunogen

A synthesized peptide derived from human Phospho-CTNND1 (Y228) was used as the immunogen for the Phospho-p120 Catenin (Tyr228) antibody.

## Storage

Store the Phospho-p120 Catenin (Tyr228) antibody at -20oC.