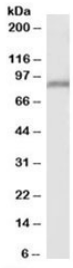
PPIG Goat Polyclonal Antibody / Peptidylprolyl Isomerase G Antibody (R35559)

Catalog No.	Formulation	Size
R35559-100UG	0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Mouse, Rat, Dog, Cow
Format	Antigen affinity purified
Host	Goat
Clonality	Polyclonal (goat origin)
Isotype	Goat Ig
Purity	Antigen affinity
Gene ID	9360
Applications	Western blot: 1-3ug/ml ELISA (peptide) LOD: 1:1000
Limitations	This PPIG Goat Polyclonal Antibody / Peptidylprolyl Isomerase G Antibody is available for research use only.



PPIG Goat Polyclonal Antibody by WB in Human Kidney Lysate. Western blot analysis of human kidney tissue lysate using goat polyclonal PPIG antibody at 2 ug/ml. A single band is detected at approximately 90 kDa, consistent with the predicted molecular weight of 88 kDa for Peptidylprolyl Isomerase G (Cyclophilin G).

Description

PPIG Goat Polyclonal Antibody recognizes peptidyl-prolyl cis-trans isomerase G (PPIG), a member of the cyclophilin family of proteins involved in protein folding, RNA processing, and regulation of gene expression. Also known as Cyclophilin G, this enzyme catalyzes the interconversion of cis and trans conformations at peptide bonds preceding

proline residues. Peptidylprolyl Isomerase G influences protein structure and molecular interactions, particularly within complexes associated with nuclear RNA metabolism.

PPIG contains a conserved cyclophilin catalytic domain and an extended region enriched in serine-arginine (SR) dipeptide motifs. These structural features distinguish Cyclophilin G from smaller cyclophilin family members and support interactions with proteins involved in precursor messenger RNA (pre-mRNA) processing. The combination of catalytic and protein interaction domains allows PPIG to participate in specialized nuclear functions beyond conventional protein folding.

A major biological role of PPIG involves its association with the spliceosome, the large ribonucleoprotein complex responsible for removing introns from pre-mRNA. Spliceosome assembly requires coordinated interactions among small nuclear ribonucleoproteins, splicing factors, and regulatory proteins. Cyclophilin G has been identified in spliceosomal complexes, where its peptidyl-prolyl isomerase activity and protein interaction capabilities may contribute to the organization and conformational regulation of RNA-processing machinery.

PPIG is also associated with nuclear speckles, subnuclear compartments enriched in splicing factors and other RNA-binding proteins. These structures help organize components involved in messenger RNA maturation and alternative splicing. Through interactions with spliceosomal proteins, Peptidylprolyl Isomerase G may influence the assembly and activity of complexes responsible for transcript processing.

Alternative splicing enables individual genes to generate multiple transcript variants, contributing to protein diversity and cellular specialization. Because PPIG participates in RNA-processing complexes, it is relevant to studies of gene expression, post-transcriptional regulation, and nuclear organization. Its relationship with the cyclophilin family also makes it useful for investigating how protein conformational changes influence the activity of large molecular assemblies.

A PPIG Goat Polyclonal Antibody from NSJ Bioreagents provides a research tool for investigating Peptidylprolyl Isomerase G, spliceosomal protein interactions, RNA metabolism, and the regulation of pre-mRNA splicing.

For an alternative PPIG antibody produced in rabbit with additional IHC and immunofluorescence validation, see our PPIG Antibody.

Application Notes

Optimal dilution of the PPIG Goat Polyclonal Antibody / Peptidylprolyl Isomerase G Antibody should be determined by the researcher.

Immunogen

Amino acids RDHNSSNNSREKKAD were used as the immunogen for this PPIG Goat Polyclonal Antibody.

Storage

Aliquot and store the PPIG Goat Polyclonal Antibody at -20oC.

Alternate Names

Cyclophilin G antibody, Peptidyl-prolyl cis-trans isomerase G antibody, Peptidylprolyl isomerase G antibody, PPIase G antibody, PPIG protein antibody, Cyclophilin G protein antibody

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