

PNKD (D-14): sc-161161



The Power to Question

BACKGROUND

PNKD (paroxysmal nonkinesigenic dyskinesia protein), also known as myofibrillogenesis regulator 1 and *trans*-activated by hepatitis C virus core protein 2, is a 385 amino acid protein that interacts with sarcomeric proteins such as myosin regulatory light chain, β -enolase and myomesin 1. Due to overexpression studies in mice, it is likely that PNKD plays a significant role in cardiac hypertrophy through activation of the NF κ B signaling pathway. There are at least three isoforms of PNKD that are produced as a result of alternative splicing events. Isoform 1 is a peripheral membrane protein, isoform 2 resides in the cytoplasm and nucleus and isoform 3 is associated with the mitochondrion. Defects in the gene encoding PNKD are the cause of dystonia type 8, a paroxysmal non-kinesigenic dystonia/dyskinesia. This disorder is characterized by attacks of involuntary movements brought on by fatigue, alcohol, stress or caffeine.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PNKD (human) mapping to 2q35; Pnkd (mouse) mapping to 1 C3.

SOURCE

PNKD (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PNKD of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-161161 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PNKD (D-14) is recommended for detection of PNKD isoforms MR-1L and MR-1M of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with isoforms MR-1S.

PNKD (D-14) is also recommended for detection of PNKD isoforms MR-1L and MR-1M in additional species, including equine, canine and bovine.

Suitable for use as control antibody for PNKD siRNA (h): sc-94252, PNKD siRNA (m): sc-152353, PNKD shRNA Plasmid (h): sc-94252-SH, PNKD shRNA Plasmid (m): sc-152353-SH, PNKD shRNA (h) Lentiviral Particles: sc-94252-V and PNKD shRNA (m) Lentiviral Particles: sc-152353-V.

Molecular Weight of PNKD isoform MR-1L: 43 kDa.

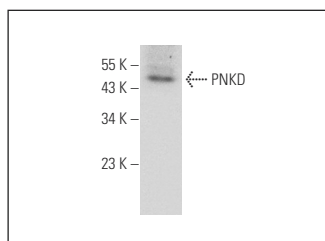
Molecular Weight of PNKD isoform MR-1S: 15 kDa.

Molecular Weight of PNKD isoform MR-1M: 41 kDa.

Molecular Weight of PNKD isoform 4: 37 kDa.

Positive Controls: mouse brain tissue extract: sc-2253.

DATA



PNKD (D-14): sc-161161. Western blot analysis of PNKD expression in mouse brain tissue extract.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.