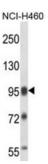
Datasheet

Version: 3.0.0 Revision date: 10 Sep 2025



Splicing Factor Proline And Glutamine Rich (SFPQ) Antibody

Catalogue No.:abx027680



DNA-and RNA binding protein, involved in several nuclear processes. Essential pre-mRNA splicing factor required early in spliceosome formation and for splicing catalytic step II, probably as an heteromer with NONO. Binds to pre-mRNA in spliceosome C complex, and specifically binds to intronic polypyrimidine tracts. Interacts with U5 snRNA, probably by binding to a purine-rich sequence located on the 3' side of U5 snRNA stem 1b. May be involved in a pre-mRNA coupled splicing and polyadenylation process as component of a snRNP-free complex with SNRPA/U1A. The SFPQ-NONO heteromer associated with MATR3 may play a role in nuclear retention of defective RNAs. SFPQ may be involved in homologous DNA pairing; in vitro. promotes the invasion of ssDNA between a duplex DNA and produces a D-loop formation. The SFPQ-NONO heteromer may be involved in DNA unwinding by modulating the function of topoisomerase I/TOP1; in vitro, stimulates dissociation of TOP1 from DNA after cleavage and enhances its jumping between separate DNA helices. The SFPQ-NONO heteromer may be involved in DNA nonhomologous end joining (NHEJ) required for double-strand break repair and V (D) J recombination and may stabilize paired DNA ends; in vitro, the complex strongly stimulates DNA end joining, binds directly to the DNA substrates and cooperates with the Ku70/G22P1-Ku80/XRCC5 (Ku) dimer to establish a functional preligation complex. SFPQ is involved in transcriptional regulation. Transcriptional repression is probably mediated by an interaction of SFPQ with SIN3A and subsequent recruitment of histone deacetylases (HDACs). The SFPQ-NONO/SF-1 complex binds to the CYP17 promoter and regulates basal and cAMP-dependent transcriptional avtivity. SFPQ isoform Long binds to the DNA binding domains (DBD) of nuclear hormone receptors, like RXRA and probably THRA, and acts as transcriptional corepressor in absence of hormone ligands. Binds the DNA sequence 5'-CTGAGTC-3' in the insulin-like growth factor response element (IGFRE) and inhibits IGF-Istimulated transcriptional activity.

Target: Splicing Factor Proline And Glutamine Rich (SFPQ)

Clonality: Polyclonal

Reactivity: Human

Tested Applications: ELISA, WB

Host: Rabbit

Recommended dilutions: WB: 1/2000. Optimal dilutions/concentrations should be determined by the end user.

Conjugation: Unconjugated

Immunogen: KLH-conjugated synthetic peptide between 676-705 amino acids from the C-terminal region of

human SFPQ.

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Isotype: IgG

Form: Liquid

Purification: Purified through a protein A column, followed by peptide affinity purification.

Storage: Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.

UniProt Primary AC: P23246 (UniProt, ExPASy)

Gene Symbol: SFPQ

KEGG: hsa:6421

String: <u>9606.ENSP00000349748</u>

Molecular Weight: Calculated MW: 76.1 kDa

Buffer: PBS containing 0.09% sodium azide.

Specificity: Predicted to react with Mouse SFPQ.

Note: THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC,

THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL

CONSUMPTION.