

## Allgemeine Informationen

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|---|--|---|
| <b>Katalog-Nr.:</b><br>15585-1-AP   | <b>GenBank-Zugangsnummer:</b><br>BC051192  | <b>Reinigungsmethode:</b><br>Antigen-Affinitätsreinigung                              |
| <b>Größe:</b><br>150ul , Konzentration: 350 µg/ml von Nanodrop und 133 µg/ml durch die Bradford-Methode mit BSA als Standard; | <b>GeneID (NCBI):</b><br>6421  | <b>Empfohlene Verdünnungen:</b><br>WB 1:500-1:3000<br>IHC 1:20-1:200<br>IF 1:50-1:500 |
| <b>Wirt:</b><br>Kaninchen   | <b>Vollständiger Name:</b><br>splicing factor proline/glutamine-rich (polypyrimidine tract binding protein associated) |   |
| <b>Isotyp:</b><br>IgG   | <b>Berechnete Masse:</b><br>76 kDa   |   |
| <b>Immunogen Katalognummer:</b><br>AG7181   | <b>Beobachtete Masse:</b><br>90-100 kDa  |   |

## Anwendungen

## Geprüfte Anwendungen:

IF, IHC, WB, ELISA

## In Publikationen genannte Anwendungen:

IF, IHC, IP, RIP, WB

## Getestete Reaktivität:

Human, Maus, Ratte

## Zitierte Arten:

Human, Maus

**Hinweis-IHC: Antigenmaskierung mit TE-Puffer pH 9,0 empfohlen. (\*) Wahlweise kann die Antigenmaskierung auch mit Citratpuffer pH 6,0 erfolgen.**

## Positivkontrollen:

**WB** : HeLa-Zellen, BxPC-3-Zellen, humanes Hirngewebe, Jurkat-Zellen, Maushirngewebe, PC-3-Zellen, Y79-Zellen

**IHC** : humanes Hirngewebe,

**IF** : HeLa-Zellen,

## Hintergrundinformationen

SFPQ, also named PSF, encodes a nuclear factor implicated in the splicing and regulation of gene expression. SFPQ probably forms a heteromer with NONO and participates in DNA pairing and DNA break repair program. Very recently SFPQ was identified as a downstream target of tau, complete nuclear depletion and cytoplasmic accumulation of SFPQ were shown in the neurons and astrocytes of brains with Alzheimer's disease (AD), more strikingly, reduced SFPQ levels may progress together with tau pathology, these observation strongly suggests the important role of SFPQ pathology in neurodegenerative diseases including AD. SFPQ encompasses 707 amino acids and has a molecular weight of 76 kDa, although it typically migrates on a sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE) gel at an apparent molecular weight of 100 kDa. Proteolytic cleavage products of apparent molecular weights of 47 and 68 kDa, and an alternatively spliced form of 669 amino acids, have also been described in various cell types. (PMID: 25832716). Splicing Factor Proline and Glutamine rich (SFPQ) as the most significant intron-retaining transcript across diverse ALS-causing mutations (VCP, SOD1 and FUS). SFPQ protein binds extensively to its retained intron, which exhibits high cytoplasmic abundance in VCP mutation compared with controls. Crucially, the protein is less abundant in the nuclei of VCP mutation cultures and is ultimately lost from nuclei of MNs in mouse models (SOD1mu and VCP mutation transgenic mouse models) and human sporadic ALS post-mortem samples. In summary, our study implicates SFPQ IR and nuclear loss as general molecular hallmarks of familial and sporadic ALS.

## Bemerkenswerte Veröffentlichungen

| Verfasser     | Pubmed ID | Journal      | Anwendung |
|---------------|-----------|--------------|-----------|
| Shaojun Zhang | 34737357  | Cell Res     | WB        |
| Shi-Wei He    | 32661324  | Oncogene     | WB,RIP,IF |
| Xu Wang       | 35910786  | Theranostics | WB        |

## Lagerung

## Lagerungsbedingungen:

Bei -20°C lagern. Nach dem Versand ein Jahr lang stabil

## Lagerungspuffer:

PBS mit 0.02% Natriumazid und 50% Glycerin pH 7.3.

Aliquotieren ist nicht notwendig bei -20°C Lagerung

\*\*\* 20ul-Größen enthalten 0.1% BSA

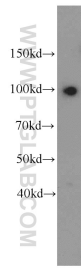
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

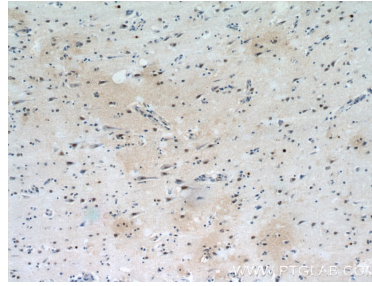
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

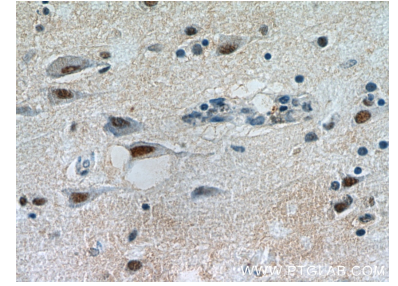
## Ausgewählte Validierungsdaten



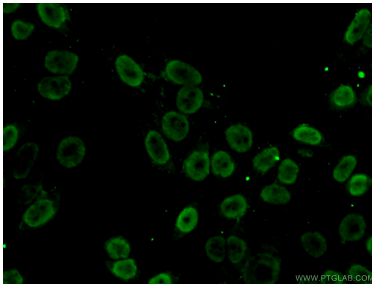
HeLa cells were subjected to SDS PAGE followed by western blot with 15585-1-AP (SFPQ antibody) at dilution of 1:700 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human brain using 15585-1-AP (SFPQ antibody) at dilution of 1:50 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human brain using 15585-1-AP (SFPQ antibody) at dilution of 1:50 (under 40x lens).



Immunofluorescent analysis of (10% Formaldehyde) fixed HeLa cells using 15585-1-AP (SFPQ antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).