## À des fins de recherche uniquement

## Anticorps Monoclonal anti-SFPQ

CL488-67129

Numéro de catalogue: CL488-67129



Informations de base

Numéro de catalogue: Numéro d'acquisition GenBank:

BC051192

Méthode de purification: Purification par protéine G

Identification du gène (NCBI): CloneNo.: 100ul , Concentration: 1000  $\mu g/ml$  by 6421 1G4A5

Nanodrop: Nom complet: Excitation/Emission maxima

splicing factor proline/glutamine-richwavelengths: (polypyrimidine tract binding protein 493 nm / 522 nm Mouse

associated) Isotype: MW calculé lgG1 76 kDa Immunogen Catalog Number: AG7181

MW observés: 90-100 kDa

**Applications** 

Applications testées:

FC (Intra)

Spécificité de l'espèce: Humain, rat, souris

## Informations générales

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.

Stockage

Stockage:

Stocker à -20 °C. Éviter toute exposition à la lumière. Stable pendant un an après l'expédition.

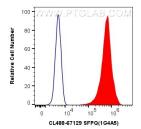
Tampon de stockage:

PBS avec glycérol à 50 %, Proclin300 à 0,05 % et BSA à 0,5 %, pH 7,3.

L'aliquotage n'est pas nécessaire pour le stockage à -20C

\*\*\* Les 20ul contiennent 0,1% de BSA.

## Données de validation sélectionnées



1X10^6 HeLa cells were intracellularly stained with 0.4 ug CoraLite® Plus 488 Anti-Human SFPQ (CL488-67129, Clone:1G4A5) (red), or 0.4 ug CoraLite® Plus 488 Mouse IgG1 Isotype Control (MOPC-21) (CL488-65124, Clone: MOPC-21) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).