

À des fins de recherche uniquement

# Anticorps Monoclonal anti-FUS/TLS



Numéro de catalogue: 60160-1-Ig

Phare

19 Publications

## Informations de base

<b>Numéro de catalogue:</b> 60160-1-Ig	<b>Numéro d'acquisition GenBank:</b> BC026062	<b>Méthode de purification:</b> Purification par protéine G
<b>Taille:</b> 150ul , Concentration: 1000 µg/ml by Nanodrop;	<b>Identification du gène (NCBI):</b> 2521	<b>CloneNo.:</b> 3A10B5
<b>Hôte:</b> Mouse	<b>Nom complet:</b> fusion (involved in t(12;16) in malignant liposarcoma)	<b>Dilutions recommandées:</b> WB 1:5000-1:50000 IP 0.5-4.0 ug for IP and 1:5000-1:50000 for WB
<b>Isotype:</b> IgG1	<b>MW calculé:</b> 75 kDa	<b>IHC 1:500-1:2500</b> <b>IF 1:20-1:200</b>
<b>Immunogen Catalog Number:</b> AG2150	<b>MW observés:</b> 68-75 kDa	

## Applications

**Applications testées:**  
FC, IF, IHC, IP, WB, ELISA

**Demandes citées:**  
IF, IHC, IP, RIP, WB

**Spécificité de l'espèce:**  
Humain, porc, rat, souris

**Espèces citées:**  
Drosophile, Humain, souris

**Contrôles positifs:**

**WB :** cellules HepG2, cellules HeLa, cellules HL-60

**IP :** cellules HeLa,

**IHC :** tissu de gliome humain, tissu cérébral humain (DLFT), tissu de côlon humain, tissu de tumeur ovarienne humain

**IF :** tissu cérébral humain (SLA), cellules HeLa

**Remarque-IHC: il est suggéré de démasquer l'antigène avec un tampon de TE buffer pH 9,0; (\*) À défaut, 'le démasquage de l'antigène peut être 'effectué avec un tampon citrate pH 6,0.**

## Informations générales

FUS (also named TLS and POMp75) belongs to the RRM TET family. FUS may play a role in the maintenance of genomic integrity; it binds both single-stranded and double-stranded DNA and promotes ATP-independent annealing of complementary single-stranded DNAs and D-loop formation in superhelical double-stranded DNA. FUS is also an RNA-binding protein, and its links to neurodegenerative disease proffer the intriguing possibility that altered RNA metabolism or RNA processing may underlie or contribute to neuron degeneration. Two research groups simultaneously reported that FUS is present in 5% of the pathological aggregations (inclusions) seen in familial amyotrophic sclerosis (fALS). FUS-positive inclusions were also reported in cases of sporadic ALS (sALS). More recently, wild-type FUS has also been implicated in the pathological development of frontotemporal lobar dementia (FTLD) with ubiquitin-positive inclusions (FTLD-U), further linking FUS to the pathogenesis of neurodegenerative diseases. There is some debate as to whether FUS colocalizes with TDP-43 in TDP-43-positive cases of ALS and whether TDP-43 and FUS cause neurodegenerative disease independently or contributively of one another. This antibody is a mouse monoclonal antibody raised against an internal region of human FUS. Initial reports from our customers suggest this new monoclonal FUS antibody (60160-1-Ig) is a useful tool in ALS and FTLD research. For more details, please see our blog article regarding the matter.

## Publications notables

Autrice	Pubmed ID	Journal	Application
Helena Gossye	36171642	Brain	IHC
Liang Lu	25239623	J Biol Chem	WB
Bo Hu	27615052	Ann Neurol	WB,IF

## Stockage

**Stockage:**

Stocker à -20°C. Stable pendant un an après l'expédition.

**Tampon de stockage:**

PBS avec azoture de sodium à 0,02 % et glycérol à 50 % pH 7,3

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

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

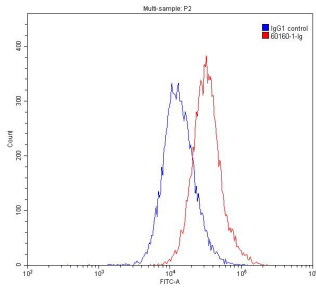
For technical support and original validation data for this product please contact:

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

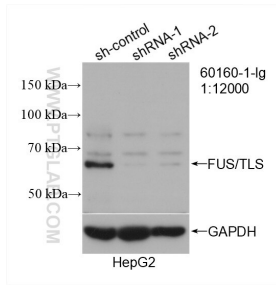
E: proteintech@ptglab.com  
W: ptglab.com

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

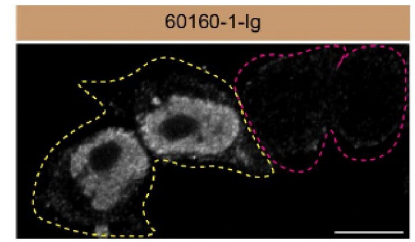
# Données de validation sélectionnées



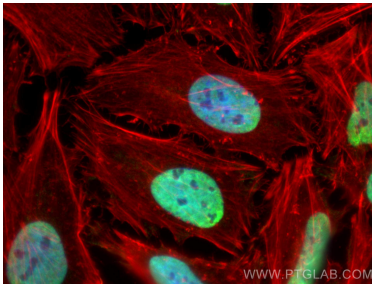
1X10<sup>6</sup> K-562 cells were stained with 0.20µg FUS/TLS antibody (60160-1-Ig, red) and control antibody (blue). Fixed with 90% MeOH.



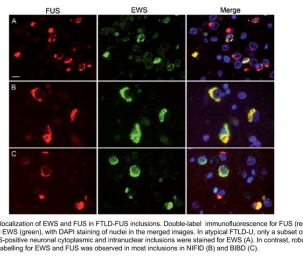
WB result of FUS/TLS antibody (60160-1-Ig; 1:12000; incubated at room temperature for 1.5 hours) with sh-Control and sh-FUS/TLS transfected HepG2 cells.



HeLa WT cells (yellow outline) and FUS KO cells (red outline) labelled with a green or a far-red fluorescence dye, respectively. Cells fixed with 4% PFA and stained with 60160-1-Ig at 1:2000 plus DAPI. Bars = 10 µm. Data provided by YCharOS, an open science company with a mission to validate commercial antibodies to improve scientific reproducibility and transparency.

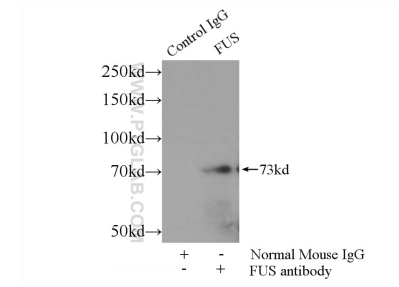


Immunofluorescent analysis of (4% PFA) fixed HeLa cells using FUS/TLS antibody (60160-1-Ig, Clone: 3A10B5) at dilution of 1:800 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).

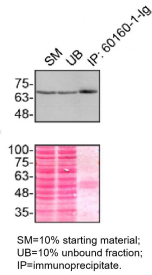


Colocalization of EWS and FUS in FTLD-FUS inclusions. Double-label immunofluorescence for FUS (red) and EWS (green), with DAPI staining of nuclei in the merged images. In atypical FTLD-FUS, only a subset of FUS-positive neuronal cytoplasmic and intranuclear inclusions were stained for EWS (A). In contrast, robust colocalizing for EWS and FUS was observed in most inclusions in NFD (B) and SMD (C).

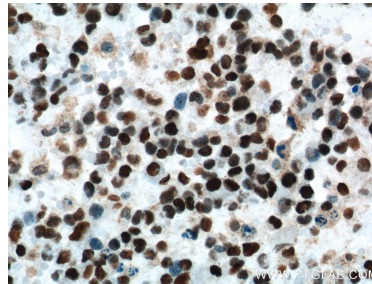
IF result of McAB FUS (60160-1-Ig) in the Paper "FET proteins TAF15 and EWS are selective markers that distinguish FTLD with FUS pathology from amyotrophic lateral sclerosis with FUS mutations" from Manuela Neumann.



IP Result of anti-FUS/TLS (IP:60160-1-Ig, 4µg; Detection:60160-1-Ig 1:10000) with HeLa cells lysate 920µg.



HeLa lysates prepared and IP of FUS performed using 1.0 µg of 60160-1-Ig coupled to protein G-Sepharose beads. The Ponceau stained transfers of each blot are shown. Data provided by YCharOS, an open science company with a mission to validate commercial antibodies to improve scientific reproducibility and transparency.



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 60160-1-Ig (FUS/TLS Antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).