

For Research Use Only

FUS/TLS Monoclonal antibody

Catalog Number: 68262-1-Ig

Featured Product

5 Publications



Basic Information

Catalog Number:

68262-1-Ig

Size:

150ul, Concentration: 500 ug/ml by Nanodrop;

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG2150

GenBank Accession Number:

BC026062

GeneID (NCBI):

2521

UNIPROT ID:

P35637

Full Name:

fusion (involved in t(12;16) in malignant liposarcoma)

Calculated MW:

75 kDa

Observed MW:

53 kDa, 68-75 kDa

Purification Method:

Protein G purification

CloneNo.:

1B4F8

Recommended Dilutions:

WB: 1:5000-1:50000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:5000-1:20000

IF-P: 1:200-1:800

IF-Fro: 1:200-1:800

FC (Intra): 0.40 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF-P, IF-Fro, FC (Intra), IP, ELISA

Cited Applications:

WB

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: HeLa cells, Jurkat cells, Neuro-2a cells, rat brain tissue, HepG2 cells, HEK-293 cells, mouse brain tissue

IP: K-562 cells,

IHC: rat brain tissue, human ovary tumor tissue, human colon tissue, mouse brain tissue, mouse cerebellum tissue

IF-P: mouse brain tissue,

IF-Fro: rat brain tissue,

FC (Intra): HEK-293T cells,

Background Information

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[PMID: 22640227]. FUS may be a cause of angiomatoid fibrous histiocytoma (AFH) and is implicated in certain forms of amyotrophic lateral sclerosis (ALS) and frontotemporal dementias (FTDs) such as frontotemporal lobar dementia with ubiquitin inclusions (FTLD-U)(PMID: 22640227). Multiple phosphorylation on the N terminus of FUS caused that FUS was detected 68-75 kDa (PMID:24899704).

Notable Publications

Author	Pubmed ID	Journal	Application
Man Cheng	40069360	Nat Neurosci	WB
Dongtao Liu	39708203	Clin Exp Med	WB
Nicole Scott-Hewitt	38942014	Cell	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

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

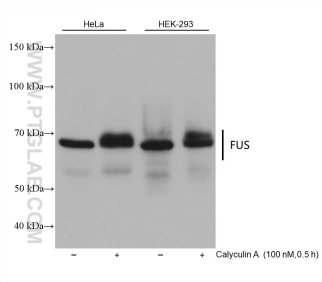
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

E: proteintech@ptglab.com

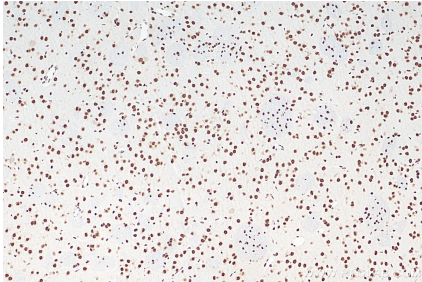
W: ptglab.com

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

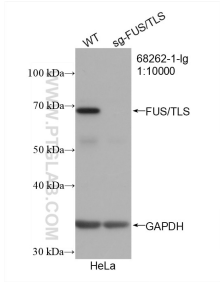
Selected Validation Data



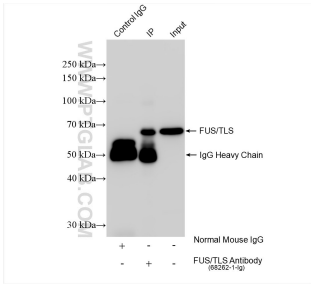
Untreated and Calyculin A treated HeLa and HEK-293 cells were subjected to SDS PAGE followed by western blot with 68262-1-Ig (FUS/TLS antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



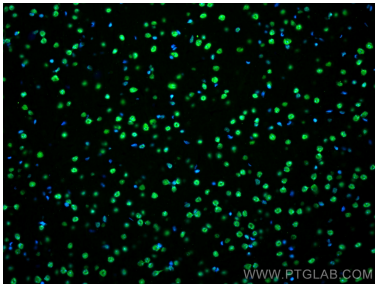
Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 68262-1-Ig (FUS/TLS antibody) at dilution of 1:10000 (under 10x Lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



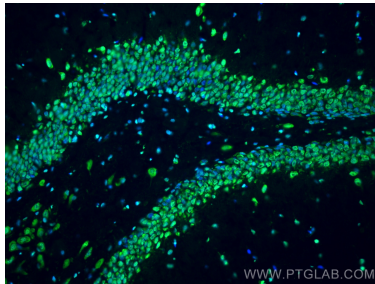
WB result of FUS/TLS antibody (68262-1-Ig; 1:10000; room temperature for 1.5 hours) with negative control and FUS/TLS knockout HeLa cells.



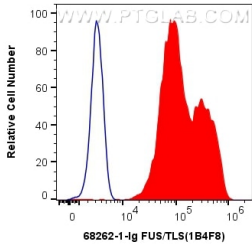
IP result of anti-FUS/TLS (IP:68262-1-Ig, 4ug; Detection:68262-1-Ig 1:5000) with K-562 cells lysate 1800 ug.



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using FUS/TLS antibody (68262-1-Ig, Clone: 1B4F8) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded rat brain tissue using FUS/TLS antibody (68262-1-Ig, Clone: 1B4F8) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).



1X10⁶ HEK-293T cells were intracellularly stained with 0.4 ug Anti-Human FUS/TLS (68262-1-Ig, Clone:1B4F8) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG1 Isotype Control (MOPC-21) (65124-1-Ig, Clone: MOPC-21) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).