For Research Use Only

CoraLite® Plus 488-conjugated FUS/TLS Monoclonal antibody



Featured Product

Basic Information

CL488-60160 Size: 1000 µ g/ml Source: Mouse Isotype: IgG1 Immunogen Catalog Number: AG2150

Catalog Number:

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:

75 kDa

Purification Method: Protein G purification CloneNo.: 3A10B5 Recommended Dilutions: IF 1:50-1:500

Excitation/Emission maxima wavelengths: 493 nm / 522 nm

Applications

Tested Applications: FC (Intra), IF/ICC Species Specificity: human, mouse

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. Two research groups simultaneously reported that FUS is present in 5% of the pathalogical 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 frototemporal lobar dementia (FTLD) with ubiquitin-positive inclusions (FTLD-U), further linking FUS to the pathogenesis of neurogenerative 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 (60160-1-1g) is a useful tool in ALS and FTLD research. For more details, please see our blog article regarding the matter.

Positive Controls:

IF : HeLa cells,

Storage

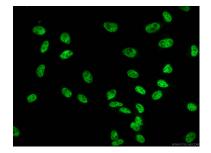
Storage: Store at -20°C. Avoid exposure to light. Stable for one year after shipment. Storage Buffer: PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3. Aliguoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:T: 4006900926E: Proteintech-CN@ptglab.comW: ptgcn.com

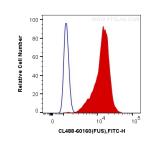
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Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CL488-60160 (FUS/TLS antibody) at dilution of 1:100.



1X10^6 K-562 cells were intracellularly stained with 0.2 ug CoraLite® Plus 488 Anti-Human FUS/TLS (CL488-60160, Clone:3A10B5) (red), or 0.2 ug Mouse IgG1 Isotype Control (CL488-66360, Clone: T1F8D3F10) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).