For Research Use Only

CoraLite® Plus 647-conjugated FUS/TLS Monoclonal antibody



Catalog Number: CL647-60160

Featured Product

Basic Information

Catalog Number: CL647-60160

1000 μg/mL Source:

Mouse Isotype: lgG1

Immunogen Catalog Number:

AG2150

75 kDa

GenBank Accession Number:

BC026062 GeneID (NCBI):

UNIPROT ID: P35637 Full Name:

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

Calculated MW: 75 kDa

Observed MW:

Purification Method:

Protein G purification

CloneNo.: 3A 10B5

Excitation/Emission maxima

wavelengths: 654 nm / 674 nm

Applications

Tested Applications:

FC (Intra)

Species Specificity:

human, mouse, rat, pig

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-Ig) is a useful tool in ALS and FTLD research. For more details, please see our blog article regarding the matter.

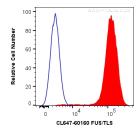
Storage

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



1X10^6 K-562 cells were intracellularly stained with 0.2 ug CoraLite® Plus 647 Anti-Human FUS/TLS (CL647-60160, Clone: 3A 10B5) (red), or 0.2 ug APC-65124; APC Mouse IgG1 Isotype Control (APC-65124, Clone: MOPC-21) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).