For Research Use Only

CoraLite® Plus 647-conjugated FUS/TLS Monoclonal antibody

Catalog Number:CL647-60160 Featured Product



Basic Information

Catalog Number: CL647-60160

Source: Mouse Isotype:

lgG1

Immunogen Catalog Number:

AG2150

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: 75 kDa Purification Method:

Protein G purification

CloneNo.: 3A10B5

Excitation/Emission maxima wavelengths:

654 nm / 674 nm

Applications

Tested Applications:

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 frotoemporal 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.

Storage

Storage:

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

Storage Buffe

PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3 $\,$

Aliquoting is unnecessary for -20°C storage

Selected Validation Data