

Purified anti-FUS Antibody

Catalog# / Size	855001 / 25 µg 855002 / 100 µg
Clone	10F7
Regulatory Status	RUO
Other Names	FUS, TLS
Isotype	Mouse IgG1, κ
Description	FUS/TLS is an RNA-binding protein that was originally discovered as a fusion protein caused by chromosomal translocation in cancer. FUS/TLS is as an important member of the cellular DNA repair response. The C-terminal end of FUS is involved in protein and RNA binding, while the N-terminal motif of FUS plays a role in transcriptional activation. FUS was also shown to accumulate in the cytoplasm of neurons under hyperosmotic conditions, and FUS mislocalization has been implicated as being the first step toward disease.

Product Details

Verified Reactivity	Human, Mouse, Rat
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human TLS/FUS recombinant protein fused with GST tag.
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	WB - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by Western blotting . For Western blotting, the suggested use of this reagent is 1.0 - 5.0 µg per ml. It is recommended that the reagent be titrated for optimal performance for each application.
RRID	AB_2750473 (BioLegend Cat. No. 855001) AB_2750474 (BioLegend Cat. No. 855002)

Antigen Details

Structure	FUS is a 526 amino acid protein with an apparent molecular mass of ~ 53 kD.
Distribution	Tissue Distribution: Ubiquitously expressed Cellular Distribution: Nucleus and cytosol
Function	FUS/TLS binds to DNA and maintains genomic integrity.
Interaction	Interacts with HDAC1, RNA Polymerase II, FUSIP1, ILF3, PRMT1, RELA, SPI1, and TNPO1.
Cell Type	Astrocytes, Neurons, Oligodendrocytes
Biology Area	Cell Biology, Neurodegeneration, Neuroscience, Protein Misfolding and Aggregation, Synaptic Biology
Molecular Family	Postsynaptic proteins, Presynaptic proteins

Antigen References

1. Efimova AD, et al. 2017. *Mol Biol (Mosk)* 51:387.
2. Ederle H, Dormann D. 2017. *FEBS Lett.* 591:1489.
3. Guerrero EN, et al. 2016. *Prog. Neurobiol.* 145-146:78.

Gene ID

[2521](#)
[233908](#)
[217385](#)

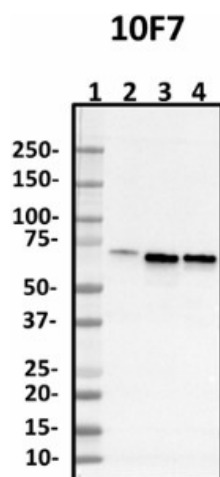
Related Protocols

[Western Blotting Protocol](#)

Other Formats

Purified anti-FUS, HRP anti-FUS

Product Data



Western blot of purified anti-FUS antibody (clone 10F7). Lane 1: Molecular weight marker; Lane 2: 20 µg of human brain lysate; Lane 3: 20 µg of mouse brain lysate; Lane 4: 20 µg of rat brain lysate. The blot was incubated with 5 µg/mL of the primary antibody overnight at 4°C, followed by incubation with HRP-labeled goat anti-mouse IgG (Cat. No. 405306). Enhanced chemiluminescence was used as the detection system.

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